

January 18, 2018



Illinois Department of Transportation
Attention: Mr. James R. Curtis
2300 South Dirksen Pkwy
Springfield, IL 62764

Re: PTB No. 174-015
FINAL Preliminary Site Investigation Report

IDOT Job No.: D-99-037-03
District: 9
County: Franklin
Municipality: Benton
Route: FAS 2882
Marked: IL 37
Street: Not Listed
From to/Alt: S. Corporate Limit in Benton to
Yellow Banks Road

PTB: 174-015 / Amec1
Work Order No.: 028
BDE Sequence No.: 19627
Requesting Agency: DOH
Contract No.: 98820
Section No.: (11, 11X, 12) RS-3
ISGS PESA No.: 3160
Anticipated Letting Date: April 27, 2018
Target PSI Completion: February 2, 2018

Dear Mr. Curtis:

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), is presenting this Final Preliminary Site Investigation Report (PSI) for the potential waste sites referenced above.

The attached final PSI provides detailed information for proposed construction activities, investigative approach and sampling, and an analysis plan.

If you have any questions, please do not hesitate to contact us.

Respectfully submitted,
Amec Foster Wheeler Environment & Infrastructure, Inc.

A handwritten signature in black ink, appearing to read "George Ryan".

George Ryan, P.E. (IL)
Vice President

A handwritten signature in black ink, appearing to read "Michael J. Hoffman".

Michael J. Hoffman, P.E. (IL)
Sr. Principal Environmental Engineer

Attachments

FINAL
PRELIMINARY SITE INVESTIGATION REPORT
FAS 2882
BENTON, FRANKLIN COUNTY, ILLINOIS

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Prepared for:

Illinois Department of Transportation
Bureau of Design and Environment
2300 S. Dirksen Parkway
Springfield, IL 62764

Submitted by:

Amec Foster Wheeler
Environment & Infrastructure, Inc.
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January 18, 2018

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1.0 Introduction

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) was tasked by the Illinois Department of Transportation (IDOT) to complete a preliminary site investigation (PSI) of potential waste sites associated with construction along FAS 2882 (IL 37, Benton) located in Franklin County, Illinois. The area investigated is depicted in Figure 1. The PSI was completed under Work Order 028 issued under IDOT Work Order Agreement for Consultant Services, PTB 174-015 (Various Statewide Assessments, Studies and Designs).

Field investigation activities were completed by Amec Foster Wheeler from October 30 through November 3 and November 21, 2017. Objectives for this investigation are defined in the IDOT-approved work plan dated October 11, 2017 as follows:

- Determine, to the degree possible pursuant to this scope of work, the nature and extent of subsurface contamination within the soil and/or groundwater of the project area. This determination specifically includes those areas in which subsurface excavation activities will be completed in support of construction activities.
- Develop an approach, including approximate volume estimates and associated cost estimates, for the proper handling and/or disposal of contaminated soil and groundwater that are likely to be encountered during the proposed construction activities within the existing and/or proposed IDOT right-of-way (ROW).
- Assess the potential for the further or continued contamination of existing IDOT property caused by the migration of contaminants from adjacent properties to and/or the project area.
- Assess the potential for the release of contaminants resulting from the proposed construction activities within the project area.
- Generate the data necessary to evaluate the potential for construction workers on-site to be exposed to contaminants.
- Prepare a PSI report presenting the findings of the investigation, conclusions, and recommendations addressing all the above referenced objectives.

This report presents the findings of the investigation in five sections. Section 1 (above) provides an introduction to the site and details of the proposed work. Section 2 provides site background information. Section 3 describes the procedures and sampling rationale used during the field investigation. Section 4 summarizes field investigation results including observations, field measurements, sampling rationale, analytical results and comparison of analytical results to regulatory criteria. Section 5 provides conclusions of the investigation and recommendations for further investigation and contaminant migration reduction techniques, if necessary.

2.0 Site Background

The Illinois State Geological Survey (ISGS) conducted preliminary environmental site assessments (PESAs) of the project area to identify sites with recognized environmental conditions (RECs) that may have a potential impact on the project. IDOT file information provided to Amec Foster Wheeler identified proposed construction activities that include cut and fill areas to depths of up to 6 feet below ground surface (bgs) in support of widening the shoulders and roadway resurfacing. Project construction plans provided to Amec Foster Wheeler indicate that partial property right-of-way acquisition is proposed for portions of this project, as well as temporary and permanent easements.

Table 2-1 presents the sites that were investigated by Amec Foster Wheeler as part of this PSI, along with the RECs identified by ISGS and the proposed construction activities and information at each site. Applicable background information about the sites, as provided in ISGS PESA 3160, is included as Appendix A. The site investigation areas are depicted in Figures 2 through 20.

Amec Foster Wheeler received correspondence from IDOT updating the estimated construction quantities for the project as follows:

| | |
|-------------------------------------|------------------|
| • UPRR | 941 cubic yards |
| • J.W. Reynolds Memorial | 89 cubic yards |
| • C.N.C. Guns & Ammo | 645 cubic yards |
| • Benton Grade School District #47 | 800 cubic yards |
| • Residential Property | 2465 cubic yards |
| • UPRR | 2594 cubic yards |
| • Vacant Land | 160 cubic yards |
| • Commercial Building and Residence | 473 cubic yards |
| • Residence | 138 cubic yards |
| • Vacant Land | 479 cubic yards |
| • Route 37 Collection Center | 900 cubic yards |
| • UPRR | 3196 cubic yards |
| • Residence | 869 cubic yards |
| • Vacant Land | 55 cubic yards |
| • UPRR | 1367 cubic yards |
| • Vacant Land | 394 cubic yards |
| • Agricultural Land | 184 cubic yards |
| • UPRR | 1443 cubic yards |
| • Residence | 187 cubic yards |

Amec Foster Wheeler requested information from IDOT District 9 (and their consultant for the project) regarding the construction limits for the project. Amec Foster Wheeler received the construction limits for the locations detailed above. Figures 2 through 20 depict the construction limits.

3.0 Field Investigation Procedures

Amec Foster Wheeler followed the IDOT approved site-specific investigation work plan and standard operating procedures (SOPs) to achieve the objectives listed in Section 1 for the project area. The field investigation for this project included screening and sampling soil at the locations identified in Section 2. This section details the procedures used for screening, sample collection, equipment decontamination, quality assurance and sample custody.

3.1 Soil Boring and Sampling Procedures

Amec Foster Wheeler advanced a total of 80 borings in the proposed construction area. Borings were advanced using a Geoprobe[®]. Boring locations are identified on Figure 2 through 20. A summary of the sampling analysis program for the PSI is presented in Table 3-1.

Individual boring locations are identified with a unique alpha-numeric identification code that identifies the ISGS PESA report number (i.e., 3160); the second component of the sample number is related to the PESA REC site number (i.e., 5 represents PESA site 5); following the REC site number is a sequential boring number with the initial site at each REC site starting at 1. Thus, for ISGS PESA 3160 REC site 5, the initial boring is 3160-5-1.

On October 24, 2017, Amec Foster Wheeler marked the boring locations at each site and oversaw completion of a public utility clearance performed by Illinois 811 (JULIE) and private utility locate completed by the drilling contractor. Following observation of utility clearances, Amec Foster Wheeler determined whether borings had to be relocated due to the presence of utilities and/or topographical concerns. On October 30, 2017, borings were advanced to the depths proposed in the IDOT-approved work plan by the Amec Foster Wheeler approved drilling contractor. When drilling was completed, Amec Foster Wheeler oversaw the drilling contractor use of a global positioning system (GPS) receiver to record the final location for each boring.

Amec Foster Wheeler mobilized to the site on November 21, 2017, to advance soil boring 3160-32-7, which was not drilled during the October 30 mobilization. The boring was inadvertently missed during the October 30 drilling mobilization. Boring 3160-32-7 was advanced to a depth of 3.5 feet bgs with a stainless-steel hand auger. The sample was collected from the 0 to 3.5-foot sample interval and submitted to the laboratory for analysis on November 21, 2017.

Geoprobe[®] rods and/or stainless-steel hand augers were decontaminated with Alconox and potable water solution between borings. Each borehole was restored with removed soil cuttings and hydrated granular bentonite at the completion of sample collection activities.

Soil cores were screened for volatile organic compounds (VOCs) using a photoionization detector (PID). The depth interval, recovery, soil description, PID reading, and other observations were recorded for each sample. Soil boring logs for this investigation are provided in Appendix B.

Amec Foster Wheeler collected 84 soil samples from the project area for laboratory analysis. Upon completion of sampling activities, soil samples were shipped to TestAmerica Laboratories in University Park, Illinois (a NELAP [National Environmental Laboratory Accreditation Program] accredited laboratory) under chain-of-custody procedures in accordance with the IDOT-approved SOPs in accordance with the analysis depicted on Table 2-1.

Groundwater was not encountered at any PESA site sampled during the field activities.

4.0 Field Investigation Results

This section presents results of the field investigation and includes a discussion of the project area geology and topography, significant field observations, sampling rationale and laboratory analytical results relative to regulatory criteria.

Table 4-1 summarizes Amec Foster Wheeler field observations and sample selection rationale by location and depth. Soil samples collected for laboratory analysis were analyzed for VOCs, SVOCs and total metals, toxicity characteristic leaching procedure (TCLP) and synthetic precipitation leaching procedure (SPLP) analysis (Table 3-1). Certain soil samples were also analyzed for polychlorinated biphenyls (PCBs), herbicides and pesticides.

Amec Foster Wheeler reviewed laboratory results for precision, accuracy and completeness in accordance with procedures and quality control limits. Tables 4-2 and 4-3 provide a comparison of analytical results for soil with applicable regulatory criteria. Analytes detected at concentrations above applicable regulatory criteria in project area soil are considered contaminants of concern (COC). A discussion of the analytical results is presented below by site. Laboratory data packages are provided in Appendix C.

In Table 4-2, analyte concentrations identified in soil borings were compared to the Maximum Allowable Concentrations (MAC) of Chemical Constituents in Uncontaminated Soil Used as Fill Material at regulated Fill Operations presented in 35 Illinois Administrative Code (IAC) Part 1100, Subpart F. The total concentration of the analyte was compared when a MAC for an inorganic analyte was based on the 35 IAC Tiered Approach to Corrective Action Objectives (TACO) Class I soil component of the groundwater ingestion exposure route (SCGIER) (35 IAC Part 742, Appendix B, Table C). Results from the TCLP and SPLP analyses were independently compared with the TACO Class I SCGIER for analytes included in 35 IAC Part 742, Appendix B, Table A (Residential Properties). The analyte was considered to exceed a MAC if the Total, TCLP and SPLP results all exceed the applicable criteria. Additionally, if the TCLP and SPLP concentrations, for a given constituent, exceeded the TACO Soil Remediation Objective (SRO) for the Soil Component of the Groundwater Ingestion Exposure Route, the constituent was considered a contaminant of concern.

When the MAC for a constituent is location-specific, the detected constituent concentration is also compared to the location-specific MAC statistical area background concentration identified in 35 IAC Part 742, Appendix B, Table G and H. Analytes detected at concentrations that exceed the statistical area background concentration for the project area are considered COCs.

Amec Foster Wheeler also evaluated sample pH levels and the results of PID headspace screening pursuant to 35 IAC 1100.201(g) and 205(b)(1), respectively. Soil pH must be between 6.25 and 9.0 standard units (SU) in order for the soil to be accepted at a clean construction demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO). Soils with a pH measurement outside of the acceptable range but otherwise not impacted by COCs may be used on-site as fill and/or managed and disposed of off-site in accordance with Article 202.03 (Standard Specifications for Road and Bridge Construction, Adopted January 1, 2016).

In addition, PID headspace screening results were compared to PID background readings. The PID instrument is accurate to 1 parts per million (ppm) between 0 and 100 ppm. The PID was calibrated at the beginning of each field day and re-calibrated as necessary based on changing field conditions (i.e., primary wind direction, temperature, precipitation). Background was established at 0 ppm for this site. Soil exhibiting PID readings above background cannot be accepted by a CCDD/USFO.

The Amec Foster Wheeler field investigation, conducted October 30 through November 3 and November 21, 2017, was designed to provide an initial characterization of site conditions at pre-designated boring locations in accordance with objectives detailed in Section 1. The investigation was limited in terms of analytical parameters and number of samples collected, based on the site information provided in ISGS PESA #3160 (Appendix A). At the request of IDOT, boring spacing along the railroad ROWs were lengthened as a cost saving measure. Consequently, the findings and conclusions of this investigation are subject to revision should additional site information becomes available.

4.1 Project Area Geology and Topography

Amec Foster Wheeler advanced 80 soil borings for this project and collected samples from depths ranging from 0.0 feet to 6.0 feet bgs. Observations of subsurface materials in the project area are described by the soil borings included in Appendix B. The following information was provided by ISGS PESA 3160:

Bedrock geology. The uppermost bedrock (Bond Formation) in all but the south edge of the project area consists of Pennsylvanian aged rocks. In the southern portion of the project area, the Pennsylvanian aged Shelburn-Patoka Formation is observed. The Bond Formation consists of primarily limestones, sandstones and coals. The Shelburn-Patoka Formation consists of shales, limestones and coals.

Surficial geology. The total thickness of surficial deposits in the project area has been mapped between 25 to 50 feet thick on the northern and southern portions of the project area. The total thickness of surficial deposits in the central portion of the project area has been mapped to less than 20 feet. These deposits consist of loamy sand and glacial deposits of the Glassford Formation overlying the Pennsylvanian-aged bedrock.

Soils. Along the project right-of-way, the Natural Resources Conservation Service has mapped the soils as Bonnie silt loam with 0-2% slopes, frequently flooded, Cisne silt loam 0-2% slopes and Wynoose silt loam 0-2% slopes. The soils are mapped as containing 33-100% hydric components. No other soil in the project area is classified as containing more than 33% hydric components. The Hickory-Kell silt loams contain 18-35% slopes while the Plumfield silty clay loam has 5-18% slopes categorized as non-prime farmland.

The chemical soil properties for Franklin County, reported by the NRCS online database, show pH ranges from 0 to 79 bgs in the Bonnie silt loam to be on the order of 4.5-7.3 standard units (S.U.), the Cisne silt loam ranges from 4.5 to 7.3 S.U. and the Wynoose silt loam ranges from 3.5 to 7.3 S.U.

Field screening the on-site lithology shows predominantly silty clay to silt lithology with lenses of clay to a maximum depth of 10 feet bgs. The lithology at several ISGS sites contained varying amounts of fill material consisting of: cinders, gravel and brick to depths up to 3-feet bgs.

Coal Mining. Illinois Coal Mine Maps of Franklin County indicate that coal mining has taken place throughout the entire project area. Two former mines operated near the site including Benton #1 and Orient #2, which underlie the project area. Benton #1 operated from 1905 to 1924 and underlies the northern portion of the project area. This coal was extracted using the room and pillar method from depths ranging from 618 to 624 feet. Orient #2 mine underlies the central and southern portions of the project area. This mine operated from 1922-1960 and the depth to the coal ranged from 480 to 500 feet. No shafts were identified within .25 miles of the project right-of-way for these mines.

Hydrogeology. Hydrogeology information was not included in the PESA; however, it is believed that shallow unconsolidated groundwater exists below the site and locally flows northwest towards Rend Lake. Regionally, groundwater is anticipated to flow southwest towards the Big Muddy River which flows west into the Mississippi River.

The field investigation observed moist conditions at all ISGS sites and did not encounter static groundwater in the 0 to 10 feet bgs interval. The proposed temporary monitoring wells were not installed as there was insufficient water for sample collection.

Wetlands. One palustrine wetland was identified at ISGS 3160 PESA sites: 22, 26, 38, 58, 59 and 60. The wetlands were defined by aerial photographs and may be either overstated or missing entirely.

Seismic Risk. The project is located in an area with known fault zones and bedrock gravitational acceleration ranges that have a 2% probability of being exceeded in 50 years are between 20% and 80% g.

4.2 ISGS #3160-5 (UPRR) – 1400 block of S. Main St., Benton

4.2.1 Field Observations at ISGS #3160-5 UPRR

Amec Foster Wheeler completed 3 soil borings (3160-5-1 through 3160-5-3) at ISGS #3160-5 (UPRR) in accordance with Table 3-1 and Figure 3 and 4. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected to a maximum construction depth of 1.2' for analysis. Groundwater was not encountered in ISGS 3160-5.

4.2.2 Analytical Results for ISGS #3160-5 UPRR

Metals were detected in soil samples analyzed from borings 3160-5-1 through 3160-5-3. Table 4-2 includes results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 6.1-8.6 SU.

4.2.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-5 UPRR

Arsenic was detected at a concentration above certain total metals MAC criteria in sample 3160-5-1 (1.2') but below the most stringent TACO criteria.

Iron was detected at a concentration above total metal MAC criteria in the samples submitted from borings 3160-5-1 and 3160-5-2, all of which were sampled at the 1.2 foot bgs interval.

Lead was detected at a concentration above the total metals MAC criteria in the sample submitted from boring 3160-5-1 which was sampled at the 1.2 foot bgs interval but below the most stringent TACO criteria.

4.2.4 IDOT Construction Activities at ISGS #3160-5 UPRR

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 3 and 4 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 1.2 feet bgs. Assumed areas of impact and COCs are identified in Figures 3, 4 and 21. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings (0.0) were at or below background screening of site soil. The pH results from 3160-5-2 (0-1.2') soil sample was below the acceptable range to be considered CCDD eligible. All other 3160-5 borings submitted for analysis were within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO.

Laboratory results were detected above MAC criteria for soil sample results collected from boring 3160-5-1 and the soil is eligible for management to a CCDD facility or USFO (Table 4-3).

Laboratory results were detected outside the acceptable pH criteria in the soil sample submitted from boring 3160-5-2 and the soil is classified as uncontaminated waste; however, it is not eligible for CCDD (Table 4-3).

Laboratory results were not detected above any criteria in soil samples submitted from boring 3160-5-3 and the soil is classified as unrestrictive and no special provision will be required (Table 4-3).

4.2.5 IDOT Property Acquisition at ISGS #3160-5 UPRR

IDOT plans include a permanent easement at ISGS #3160-5 (UPRR). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.3 ISGS #3160-8 (J.W. Reynolds Memorial) – 1410 S. Main St., Benton

4.3.1 Field Observations at ISGS #3160-8 J.W. Reynolds Memorial

Amec Foster Wheeler completed two borings (3160-8-1 and 3160-8-2) at ISGS #3160-8 (J.W. Reynolds Memorial) in accordance with Table 3-1 and Figure 2. Evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected from ISGS 3160-8 from the 0 to 3-foot interval. Groundwater was not encountered in ISGS 3160-8.

4.3.2 Analytical Results for ISGS #3160-8 J.W. Reynolds Memorial

Acetone was detected at a low-level concentration in the sample submitted from 3160-8-1. No other VOC analyte was detectable. Several SVOCs were detected in the samples collected from 3160-8-1 and 3160-8-2; however, the detected concentrations were all below the MAC and TACO objectives. Manganese was detected in the sample collected from 3160-8-2 at a concentration exceeding all MACs. The Table 4-2 includes results for the analytes detected in soil. Soil pH results ranged from 8.3-8.5 SU.

4.3.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-8 J.W. Reynolds Memorial

Manganese was detected at a concentration above the MAC criteria in the sample submitted from 3160-8 2 (0-3') but below the TACO criteria. No other metals are considered COCs for 3160-32.

4.3.4 IDOT Construction Activities at ISGS #3160-8 J.W. Reynolds Memorial

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 3 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 3.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 2 and 21. Table 4-4 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The pH was reported within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility at all borings located within 3160-8.

Laboratory results were detected below all MAC and TACO criteria for soil collected from 3160-8-1 and the sample results are unrestrictive and no special provision will be required (Table 4-3).

Laboratory results were detected above MAC criteria (only) but below TACO criteria for soil collected from boring 3160-8-2 and the soil is classified as uncontaminated and is acceptable for management to a CCDD facility or USFO (Table 4-3).

4.3.5 IDOT Property Acquisition at ISGS #3160-8 J.W. Reynolds Memorial

IDOT plans include a partial ROW acquisition at ISGS #3160-8 (J.W. Reynolds Memorial). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.4 ISGS #3160-9 (C.N.C. Guns & Ammo) – 1401 S. Main St., Benton

4.4.1 Field Observations at ISGS #3160-9 C.N.C. Guns & Ammo

Amec Foster Wheeler completed three borings (3160-9-1 through 3160-9-3) at ISGS #3160-9 (C.N.C. Guns & Ammo) in accordance with Table 3-1 and Figure 2. Evidence of VOCs was not observed during PID headspace screening of site soils. One soil sample per boring was collected from ISGS 3160-9 from the 0 to 4-foot interval. Groundwater was not encountered at the 3160-9 site.

4.4.2 Analytical Results for ISGS #3160-9 C.N.C. Guns & Ammo

No sample analyzed from ISGS 3160-9 contained a VOC, SVOC or PCB at a concentration exceeding any MAC or TACO objective. Iron and manganese were detected in the samples collected at the site at concentrations exceeding one or more MACs and/or TACO objectives. Soil pH results ranged from 4.6-7.6 SU.

4.4.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-9 C.N.C. Guns & Ammo

The total iron samples collected from 3160-9-1 (0-4') and 3160-9-2 (0-4') exceeded all MAC objectives.

The manganese sample collected from 3160-9-1 (0-4') exceeded the TCLP and SPLP TACO Groundwater Protection objectives.

4.4.4 IDOT Construction Activities at ISGS #3160-9 C.N.C. Guns & Ammo

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 2 and Table 2-1. Excavations are estimated to extend to a maximum depth of 4.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 2 and 21. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil above background concentrations. Soil samples analyzed for pH were detected outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at boring 3160-9-1 and 2.

One or more laboratory results were detected above criteria for soil collected from 3160-9 borings: 1 and 2 at concentrations outside the acceptable range for management to a CCDD facility or USFO and the soil is considered uncontaminated (Table 4-3).

The laboratory results for the sample collected from boring 3160-9-3 indicate the soil is considered unrestrictive and no special provision will be required.

4.4.5 IDOT Property Acquisition at ISGS #3160-9 C.N.C. Guns & Ammo

IDOT plans include a partial ROW acquisition at 3160-9 (C.N.C. Guns & Ammo). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.5 ISGS #3160-10 (Benton Grade School District #47) – 1403 S. Main St., Benton

4.5.1 Field Observations at ISGS #3160-10 Benton Grade School District #47

Amec Foster Wheeler completed three borings (3160-10-1 through 3) at ISGS #3160-10 Benton Grade School District #47 in accordance with Table 3-1 and Figure 2. In accordance with the approved work plan, soil samples were collected from ISGS 3160-10 borings for laboratory analysis of VOCs, SVOCs, metals, TCLP Metals and SPLP metals. In total, three samples (one per boring) were analyzed from ISGS 3160-10 borings.

Field evidence of VOCs was observed during PID headspace screening of site soils from all three borings. Observations during field sampling showed evidence of discoloration and petroleum hydrocarbon odors that might suggest potential chemical contamination. Soil samples were collected from the 0-2.5' interval for analysis. One soil sample per boring was collected from ISGS 3160-10. Groundwater was not encountered in ISGS 3160-10.

4.5.2 Analytical Results for ISGS #3160-10 Benton Grade School District #47

A single VOC (benzene), SVOC (naphthalene) and metals were detected above applicable criteria in soil samples analyzed from borings 3160-10. Several metals were detected in the samples collected at the site. Table 4-2 included results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 4.8-8.2 SU.

4.5.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-10 Benton Grade School District #47

Benzene was detected at a concentration above the MAC criteria and above the Residential TACO migration to groundwater criteria in sample 3160-10 1 (0-2.5').

Naphthalene exceeded certain site-specific MAC criteria in the sample 3160-10-1 (0-2.5').

Iron was detected at a concentration above the MAC criteria in samples collected from all 3160-10 borings. Iron also exceeded the TCLP and SPLP TACO criteria in the sample 3160-10-3 (0-2.5').

Manganese was detected at a concentration above TCLP and SPLP TACO criteria from the 3160-10 samples: 1 (0-2.5') and 3 (0-2.5'). No other metal is considered a COC for 3160-10.

4.5.4 IDOT Construction Activities at ISGS #3160-10 Benton Grade School District #47

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 2 and Table 2-1. Excavations are estimated to extend to a maximum depth of 2.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 2, 21 and 22. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were detected during headspace screening of site soil in all three 3160-10 borings. Soil samples were analyzed for pH and results were detected outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at 3160-10 borings: 1 and 2.

Laboratory results were detected outside acceptable MAC, TACO, PID and pH criteria in all three 3160-10 borings and the soil is classified as non-special waste (Table 4-3).

4.5.5 IDOT Property Acquisition at ISGS #3160-10 Benton Grade School District #47

IDOT plans include partial ROW acquisition at ISGS #3160-10 (Benton Grade School District #47). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.6 ISGS #3160-16 (Residence) – 12524 S. Park Rd., Benton Township

4.6.1 Field Observations at ISGS #3160-16 Residence

Amec Foster Wheeler completed five borings (3160-16-1 through 3160-16-5) at ISGS #3160-16 (Residence) in accordance with Table 3-1 and Figures 3 and 4. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. In general, one sample (each) was collected from the 0 to 4-foot interval. Groundwater was not encountered in ISGS 3160-16.

4.6.2 Analytical Results for ISGS #3160-16 Residence

No VOCs were detected in soil samples analyzed from borings 3160-16 at concentrations which exceeded any applicable criteria (TACO or MAC). Two SVOCs (2-methylnaphthalene and naphthalene) and several metals were detected in the samples collected at the site. Metals were also analyzed via TCLP and SPLP analysis for soils. Soil pH results ranged from 4.9-7.9 SU. Table 4-2 included results for the analytes detected in soil.

4.6.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-16 Residence

2-methylnaphthalene was detected at a concentration above all MAC criteria in the 3160-16 samples: 4 (0-4') and 5 (0-4').

Naphthalene was detected at a concentration above certain site specific MAC criteria in the soil samples collected from 3160-16 borings: 4 and 5.

Total iron was detected at a concentration above all MAC metal criteria in all samples submitted from 3160-16 borings.

Manganese was detected at a concentration above total metals MAC criteria (only) in the sample 3160-16-1 (0-4').

4.6.4 IDOT Construction Activities at ISGS #3160-16 Residence

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 3 and 4 and Table 2-1.

Excavations associated with these improvements are estimated to extend to a maximum depth of 4.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 3, 4 and 22. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The samples analyzed for pH from 3160-16 borings: 2 (0-4'), 3 (0-4'), 5 (0-4') were below the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO. All other pH results were within range.

Laboratory results were detected above criteria for soil collected from 3160-16 borings: 2 and 3. These samples contained one or more COCs outside the acceptable range for management to a CCDD facility or USFO but the soil is considered uncontaminated (Table 4-3).

Laboratory results were detected above MAC criteria in 3160-16: 1 (0-4') and 4 (0-4') and the soil is classified as CCDD Eligible (Table 4-3)

Laboratory results were detected above MAC criteria in boring 3160-16-5 (0-4'); however, the soil is not eligible for CCDD or USFO disposal.

4.6.5 IDOT Property Acquisition at ISGS #3160-16 Residence

IDOT plans include partial ROW acquisition at ISGS #3160-16 (Residence). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.7 ISGS #3160-21 (UPRR) – 7000 block IL-37, Benton Township

4.7.1 Field Observations at ISGS #3160-21 UPRR

Amec Foster Wheeler completed 10 soil borings (3160-21-1 through 3160-21-10) at ISGS #3160-21 (UPRR) in accordance with Table 3-1 and Figures 5, 6, 7 and 8. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected to a maximum construction depth of 2.5' for analysis. Groundwater was not encountered in ISGS 3160-21.

4.7.2 Analytical Results for ISGS #3160-21 UPRR

SVOCs (2-methylnaphthalene and naphthalene) and several metals were detected in soil samples analyzed from borings 3160-21-1 through 3160-21-10. Table 4-2 includes results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 5.5-8.3 SU.

4.7.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-21 UPRR

2-methylnaphthalene was detected at a concentration above all MAC criteria in the soil sample 3160-21-2 (0-2.5').

Naphthalene was detected at a concentration above certain site-specific MAC criteria in the 3160-16 soil samples: 2 (0-2.5') and 10 (0-2.5').

Chromium was detected at a concentration above certain total metals MAC criteria in the samples 3160-21-3 (0-2.5') but below the most stringent TACO criteria.

Iron was detected at a concentration above total metal MAC criteria in the samples submitted from all 10 3160-21 borings.

Manganese was detected at a concentration above the total metals MAC criteria and Most Stringent TACO criteria in the sample submitted from boring 3160-21-2 which was sampled at the 0-2.5 foot bgs interval. Manganese also exceeded the TCLP (only) TACO criterial for sample 3160-21-4 (0-2.5').

4.7.4 IDOT Construction Activities at ISGS #3160-21 UPRR

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 5 through 8 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 2.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 5 through 8,

22 and 23. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings (0.0) were at or below background screening of site soil. The pH result from 3160-21-6 (0-2.5') soil sample was below the acceptable range to be considered CCDD eligible. All other 3160-21 samples submitted for analysis were within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO.

Laboratory results indicate the soil sampled from 3160-21 borings: 1, 3, 4, 5, 7, 8 and 9 do not exceed any applicable criteria and the soil is classified as unrestrictive (Table 4-3). No special provision will be required for 3160-21 borings: 1, 3, 4, 5, 7, 8 and 9.

Laboratory results were detected above MAC criteria for soil sample results collected from 3160-21 borings: 2 and 10 and the soil is classified as uncontaminated and is eligible for management to a CCDD facility or USFO (Table 4-3).

Laboratory results were detected outside the acceptable pH range in the soil sample submitted from boring 3160-21-6 and the soil is classified as uncontaminated; however, the soil is not eligible for management at a CCDD or USFO facility (Table 4-3).

4.7.5 IDOT Property Acquisition at ISGS #3160-21 UPRR

IDOT plans include both a temporary and permanent easement at ISGS #3160-21 (UPRR). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.8 ISGS #3160-23 (Vacant Land) - 7000 block of IL-37, Benton Township

4.8.1 Field Observations at ISGS #3160-23 Vacant Land

Amec Foster Wheeler completed two borings (3160-23-1 and 3160-23-2) at ISGS #3160-23 (Vacant Land) in accordance with Table 3-1 and Figure 5. Evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected from ISGS 3160-23 from the 0 to 4.5-foot interval. Groundwater was not encountered in ISGS 3160-23.

4.8.2 Analytical Results for ISGS #3160-23 Vacant Land

No VOC, pesticide or herbicide analytes were detectable at a concentration exceeding any applicable criteria. Two SVOCs (2-methylnaphthalene and naphthalene) were detected in the samples collected from 3160-23; however, the detected concentrations were below the MAC and TACO objectives with the exception of the sample collected from 3160-23-2. All metals analytes, including TCLP and SPLP, were below any applicable criteria. The Table 4-2 includes results for the analytes detected in soil. Soil pH results ranged from 6.2-8.1 SU.

4.8.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-23 Vacant Land

2-methylnaphthalene was detected at a concentration above all MAC criteria in the soil sample 3160-23-2 (0-4.5').

Naphthalene was detected at a concentration above certain site-specific MAC criteria in the soil sample 3160-23-2 (0-4.5'). No other analytes are considered COCs for 3160-32.

4.8.4 IDOT Construction Activities at ISGS #3160-23 Vacant Land

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 5 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 4.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 5 and 23. Table 4-4 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The pH was reported outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility at boring 3160-23-1.

Laboratory results were detected outside pH criteria (only) for soil collected from 3160-23 boring 1 and the soil is classified as uncontaminated but is not eligible for CCDD or USFO disposal (Table 4-3).

Laboratory results were detected above MAC but below TACO criteria for soil collected from 3160-23-2 and the sample results are acceptable for management to a CCDD facility or USFO (Table 4-3).

4.8.5 IDOT Property Acquisition at ISGS #3160-23 Vacant Land

IDOT plans include a partial ROW acquisition at ISGS #3160-23 (Vacant Land). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.9 ISGS #3160-25 (Commercial Building and Residence) – 7837 IL-37, Benton Township

4.9.1 Field Observations at ISGS #3160-25 Commercial Building and Residence

Amec Foster Wheeler completed two borings (3160-25-1 and 3160-25-2) at ISGS #3160-25 (Commercial Building and Residence) in accordance with Table 3-1 and Figure 6. Evidence of VOCs was not observed during PID headspace screening of site soils. One soil sample per boring was collected from ISGS 3160-25 from the 0 to 4-foot interval. Groundwater was not encountered at the site.

4.9.2 Analytical Results for ISGS #3160-25 Commercial Building and Residence

No sample analyzed from ISGS 3160-25 contained a VOC or SVOC at a concentration exceeding any MAC or TACO objective. Iron and manganese were detected in the samples collected at the site at concentrations exceeding one or more MACs and/or TACO objectives. Soil pH result for both borings was 4.8 SU.

4.9.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-25 Commercial Building and Residence

The total iron samples 3160-25-1 (0-4') and 3160-25-2 (0-4') exceeded all MAC objectives.

The manganese sample 3160-25-1 (0-4') exceeded the TCLP and SPLP TACO Groundwater Protection objectives.

4.9.4 IDOT Construction Activities at ISGS #3160-25 Commercial Building and Residence

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 6 and Table 2-1. Excavations are estimated to extend to a maximum depth of 4.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 6 and 23. Table 4-5 presents an estimated volume of impacted

soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil above background concentrations. Soil samples analyzed for pH were detected outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at 3160-25 boring 1 and 2.

One or more laboratory results were detected above criteria for soil collected from 3160-25 borings: 1 and 2 at concentrations outside the acceptable range for management to a CCDD facility or USFO and the soil is considered uncontaminated (Table 4-3).

4.9.5 IDOT Property Acquisition at ISGS #3160-25 Commercial Building and Residence

IDOT plans include a partial ROW acquisition at 3160-25 (Commercial Building and Residence). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.10 ISGS #3160-26 (Residence) – 7789 IL-37, Benton Township

4.10.1 Field Observations at ISGS #3160-26 Residence

Amec Foster Wheeler completed two borings (3160-26-1 and 2) at ISGS #3160-26 Residence in accordance with Table 3-1 and Figure 6. In accordance with the approved work plan, soil samples were collected from ISGS 3160-26 borings for laboratory analysis of VOCs, SVOCs, metals, TCLP Metals and SPLP metals.

Field evidence of VOCs was not observed during PID headspace screening of site soils from any boring. Observations during field sampling did not show any evidence of discoloration or odors that might suggest potential chemical contamination. Soil samples were collected from the 0-4' interval for analysis. One soil sample per boring was collected from ISGS 3160-26. Groundwater was not encountered in ISGS 3160-26.

4.10.2 Analytical Results for ISGS #3160-26 Residence

No VOC or SVOC analytes were detected above applicable criteria in soil samples analyzed from borings 3160-26. Several metals were detected in the samples collected at the site. Table 4-2 included results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 4.3-5.0 SU.

4.10.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #3160-26 Residence

Iron was detected at a concentration above the MAC criteria in samples collected from all 3160-26 borings.

Manganese was detected at a concentration above TCLP TACO criteria from the sample 3160-26-1 (0-4'). No other metal is considered a COC for 3160-26.

4.10.4 IDOT Construction Activities at ISGS #3160-26 Residence

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 6 and Table 2-1. Excavations are estimated to extend to a maximum depth of 4 feet bgs. Assumed areas of impact and COCs are identified in Figures 6 and 24. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil in the 3160-26 borings. Soil samples were analyzed for pH and results were detected outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at borings 1 and 2.

Laboratory results were detected outside acceptable MAC, TACO, and pH criteria in both 3160-26 borings and the soil is classified as uncontaminated (Table 4-3).

4.10.5 IDOT Property Acquisition at ISGS #3160-26 Residence

IDOT plans include partial ROW acquisition at ISGS #3160-26 (Residence). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.11 ISGS #3160-28 (Vacant Property) – 7745 IL-37, Benton Township

4.11.1 Field Observations at ISGS #3160-28 Vacant Property

Amec Foster Wheeler completed three borings (3160-28-1 through 3160-28-3) at ISGS #3160-28 (Vacant Property) in accordance with Table 3-1 and Figure 7. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. In general, one sample (each) was collected from the 0 to 5-foot interval. Groundwater was not encountered in ISGS 3160-28.

4.11.2 Analytical Results for ISGS #3160-28 Vacant Property

No VOCs were detected in soil samples analyzed from borings 3160-28 at concentrations which exceeded any applicable criteria (TACO or MAC). One SVOC (naphthalene) and several metals were detected in the samples collected at the site at concentrations above an applicable criterion. Metals were also analyzed via TCLP and SPLP analysis for soils. Soil pH results ranged from 3.8-4.9 SU. Table 4-2 included results for the analytes detected in soil.

4.11.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #3160-28 Vacant Property

Naphthalene was detected at a concentration above certain site-specific MAC criteria in the soil sample 3160-28-3 (0-5').

Total iron was detected at a concentration above all MAC metal criteria in all samples submitted from 3160-28 borings.

Selenium was detected at a concentration above total metals MAC criteria (only) in the sample submitted from boring 3160-28-3.

Manganese was detected at a concentration above TCLP TACO criteria (only) in the 3160-28 samples: 1 (0-5') and 2 (0-5'). Manganese was detected at a concentration above both the TCLP and SPLP TACO criteria in the sample 3160-28-3 (0-5').

4.11.4 IDOT Construction Activities at ISGS #3160-28 Vacant Property

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 7 and Table 2-1.

Excavations associated with these improvements are estimated to extend to a maximum depth of 5.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 7 and 24. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper

handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The samples analyzed for pH from 3160-28 borings: 1 (0-5) and 2 (0-5') were outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO. All other pH results were within range.

Laboratory results were detected outside criteria for soil collected from 3160-28 boring: 1 and 2. The samples contained one or more COCs outside the acceptable range for management to a CCDD facility or USFO and the soil is considered uncontaminated (Table 4-3).

Laboratory results were detected above criteria for soil collected from 3160-28-3. This sample contained one or more COCs outside the acceptable range for management to a CCDD facility or USFO and the soil is considered non-special waste (Table 4-3).

4.11.5 IDOT Property Acquisition at ISGS #3160-28 Vacant Property

IDOT plans include partial ROW acquisition at ISGS #3160-28 (Vacant Property). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.12 ISGS #3160-32 (Route 37 Collection Center) – 7533 IL-37, Browning Township

4.12.1 Field Observations at ISGS #3160-32 Route 37 Collection Center

Amec Foster Wheeler completed seven soil borings (3160-32-1 through 3160-32-7) at ISGS #3160-32 (Route 37 Collection Center) in accordance with Table 3-1 and Figure 8 and 9. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected to a maximum construction depth of 3.5' for analysis. Groundwater was not encountered in ISGS 3160-32.

4.12.2 Analytical Results for ISGS #3160-32 Route 37 Collection Center

VOC and PCB analytes did not exceed any applicable screening criteria. SVOCs (naphthalene and phenanthrene) and several metals were detected in soil samples analyzed from borings 3160-32-1 through 3160-32-7 at concentrations that exceeded the applicable MAC and/or TACO criteria. Table 4-2 includes results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 4.6-6.7 SU.

4.12.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #3160-32 Route 37 Collection Center

Naphthalene and phenanthrene were detected at concentrations above certain site-specific MAC criteria in the soil sample 3160-32-4 (0-3.5').

Arsenic was detected at a concentration above certain total metals MAC criteria but below the most stringent TACO criteria in the sample 3160-32-2 (0-3.5').

Chromium was detected at a concentration above certain total metals MAC criteria but below the most stringent TACO criteria in the sample 3160-32-2 (0-3.5').

Iron was detected at a concentration above total metal MAC criteria in the samples submitted from borings 3160-32-2 through 3160-32-7, all of which were sampled at the 3.5 foot bgs interval.

Manganese was detected at a concentration above the total metals MAC criteria in the samples submitted from borings 3160-32-1 and 3160-32-2. Manganese was detected at a concentration above the TCLP and SPLP TACO criteria in the sample submitted from boring 3160-32-6.

Selenium was detected at a concentration above total metal MAC criteria in the samples submitted from borings 3160-32-2 and 3160-32-4.

4.12.4 IDOT Construction Activities at ISGS #3160-32 Route 37 Collection Center

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 8 and 9 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 3.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 8, 9, 24 and 25. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings (0.0) were at or below background screening of site soil. The pH results from 3160-32 borings: 5, 6 and 7 soil sample were outside the acceptable range to be considered CCDD eligible. All other 3160-32 borings submitted for analysis were within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO.

Laboratory results were detected above MAC criteria for soil sample results collected from borings 3160-32-1, 3160-32-2 and 3160-32-3 and the soil is eligible for management to a CCDD facility or USFO (Table 4-3). Laboratory results indicate the soil is unrestricted (Table 4-3). No special provision is required.

Laboratory results were detected above MAC criteria for the soil sample result collected from boring 3160-32-4 and the soil is not eligible for management to a CCDD facility or USFO. The soil is classified as non-special waste (Table 4-3).

Laboratory results were detected outside the acceptable pH criteria in the soil sample submitted from boring 3160-32-5 through 3160-32-7 and the soil is classified as uncontaminated but is not eligible for management to a CCDD or USFO facility (Table 4-3).

4.12.5 IDOT Property Acquisition at ISGS #3160-32 Route 37 Collection Center

IDOT plans include a permanent easement at ISGS #3160-32 (Route 37 Collection Center). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.13 ISGS #3160-36 (UPRR) – 6000 - 7000 blocks of IL-37, Benton Township

4.13.1 Field Observations at ISGS #3160-36 UPRR

Amec Foster Wheeler completed 11 borings (3160-36-1 through 3160-36-11) at ISGS #3160-36 (UPRR) in accordance with Table 3-1 and Figure 9 through 12. Evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected from ISGS 3160-36 from the 0 to 3-foot interval. Groundwater was not encountered in ISGS 3160-36.

4.13.2 Analytical Results for ISGS #3160-36 UPRR

No VOC analytes were detected at a concentration exceeding any applicable criteria. Three SVOCs (benzo(a)pyrene, 2-methylnaphthalene, naphthalene) were detected in the sample collected from 3160-36-

9 at a concentration exceeding the MAC objectives. Several metals were detected in the samples collected from 3160-36-1 through 3160-36-11 at a concentration exceeding MACs. The Table 4-2 includes results for the analytes detected in soil. Soil pH results ranged from 4.3-8.7 SU.

4.13.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-36 UPRR

Benzo(a)pyrene, 2-methylnaphthalene and naphthalene were detected at concentrations above certain site-specific MAC criteria in the soil sample 3160-36-9 (0-3').

Cobalt was detected at a concentration above certain total metals MAC criteria but below the most stringent TACO criteria in the sample 3160-36-8 (0-3').

Iron was detected at a concentration above total metal MAC criteria in the 3160-36: 2 (0-3'), 4 (0-3'), 5 (0-3'), 6 (0-3'), 7 (0-3'), 8 (0-3'), 9 (0-3'), 10 (0-3') and 11 (0-3'), all of which were sampled at the 3.0' foot bgs interval.

Lead was detected at a concentration above total metal MAC criteria and SPLP TACO criteria in the sample submitted from boring 3160-36-9.

Manganese was detected at a concentration above the total metals MAC criteria in the 3160-36 samples: 1 (0-3'), 4 (0-3') and 8 (0-3'). Manganese was detected at a concentration above the TCLP (only) TACO criteria from borings 3160-36-2, 3160-36-3, 3160-36-5, 3160-36-6 and 3160-36-9. Manganese was detected at a concentration above the TCLP and SPLP TACO criteria from boring 3160-36-7.

4.13.4 IDOT Construction Activities at ISGS #3160-36 UPRR

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 9 through 12 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 3.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 9 through 12, 25 and 26. Table 4-4 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The pH was reported outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility at 3160-36 borings: 2 through 7. All other samples from 3160-36 are within the acceptable range for management of the soil at a CCDD or USFO facility.

Laboratory results were detected above MAC criteria for soil collected from 3160-36-1, 8, 10 and the soil is classified as uncontaminated and no special provision will be required.

Laboratory results were detected outside the acceptable pH range for management at a CCDD facility from 3160-36 borings: 2, 3, 4, 5, 6, 7 and 11 and the soil is classified as uncontaminated (Table 4-3).

Laboratory results were detected above MAC criteria for soil collected from boring 3160-36 9 and the soil results are within the acceptable range for management of the soil at a CCDD or USFO facility (Table 4-3).

4.13.5 IDOT Property Acquisition at ISGS #3160-36 UPRR

IDOT plans include a permanent easement at ISGS #3160-36 (UPRR). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property easement at these locations is provided on Table 5-1.

4.14 ISGS #3160-45 (Residence) – 7127 IL-37, Browning Township

4.14.1 Field Observations at ISGS #3160-45 Residence

Amec Foster Wheeler completed four borings (3160-45-1 through 3160-45-4) at ISGS #3160-45 (Residence) in accordance with Table 3-1 and Figures 11 and 12. Evidence of VOCs was not observed during PID headspace screening of site soils. Two soil samples per boring were collected from ISGS 3160-45. One sample was collected from the 0 to 5-foot interval and another sample was collected from the 5 to 6-foot interval. Groundwater was not encountered at the site.

4.14.2 Analytical Results for ISGS #3160-45 Residence

No sample analyzed from ISGS 3160-45 contained a VOC, SVOC or PCB at a concentration exceeding any MAC or TACO objective. Certain metals were detected in the samples collected at the site at concentrations exceeding one or more MACs and/or TACO objectives. Soil pH results ranged from 6.3-8.1 SU.

4.14.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #3160-45 Residence

Cobalt was detected at a concentration above certain total metals MAC criteria in the sample 3160-45-3 (0-5') but below the most stringent TACO criteria.

Iron was detected at a concentration above total metal MAC criteria in the 3160-36 samples: 1 (0-5'), 1 (5-6'), 2 (0-5'), 2 (5-6'), 3 (0-5'), and 3 (5-6').

Manganese was detected at a concentration above the total metals MAC criteria in the 3160-45 samples: 1 (5-6'), 3 (0-5') and 3 (5-6'). No other metals are considered COCs at this time.

4.14.4 IDOT Construction Activities at ISGS #3160-45 Residence

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 11 and 12 and Table 2-1. Excavations are estimated to extend to a maximum depth of 6.0 feet bgs. Assumed areas of impact and COCs are identified in Figures 11, 12, 26 and 27. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil above background concentrations. Soil samples analyzed for pH were detected within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at all 3160-45 borings.

Laboratory results indicate 3160-45-1, 3160-45-2, 3160-45-3 and 3160-45-4 are classified as unrestrictive (Table 4-3) and no special provision will be required.

4.14.5 IDOT Property Acquisition at ISGS #3160-45 Residence

IDOT plans include a partial ROW acquisition at 3160-45 (Residence). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.15 ISGS #3160-50 (Vacant Land) – 6000 IL-37, Browning Township

4.15.1 Field Observations at ISGS #3160-50 Vacant Land

Amec Foster Wheeler completed three borings (3160-50-1 through 3) at ISGS #3160-50 Vacant Land in accordance with Table 3-1 and Figure 12 and 13. In accordance with the approved work plan, soil samples were collected from ISGS 3160-50 borings for laboratory analysis of VOCs, SVOCs, metals, TCLP Metals and SPLP metals. In total, three samples (one per boring) were analyzed from ISGS 3160-50 borings: 1, 2 and 3.

Field evidence of VOCs was not observed during PID headspace screening of site soils from all three borings. Observations during field sampling did not show evidence of discoloration or odors that might suggest potential chemical contamination. Soil samples were collected from the 0-2' interval for analysis. One soil sample per boring was collected from ISGS 3160-50. Groundwater was not encountered in ISGS 3160-50.

4.15.2 Analytical Results for ISGS #3160-50 Vacant Land

VOC and SVOC analytes were not detected above any applicable criteria in soil samples analyzed from borings 3160-50. Several metals were detected in the samples collected at the site. Table 4-2 included results for the analytes detected in soil. Metals were analyzed via TCLP and SPLP analysis. Soil pH results ranged from 6.2-8.0 SU.

4.15.3 Nature and Extent of Contamination above Applicable Criteria at ISGS #3160-50 Vacant Land

Chromium was detected at a concentration above the MAC criteria but below the TACO criteria from the sample 3160-50-3 (0-2').

Iron was detected at a concentration above the MAC criteria from the samples 3160-50-2 (0-2') and 3260-50-3 (0-2').

Manganese was detected at a concentration above TCLP and SPLP TACO criteria from the sample 3160-50-1 (0-2'). No other metal is considered a COC for 3160-50.

4.15.4 IDOT Construction Activities at ISGS #3160-50 Vacant Land

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 12 and 13 and Table 2-1. Excavations are estimated to extend to a maximum depth of 2 feet bgs. Assumed areas of impact and COCs are identified in Figures 12, 13 and 27. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil in all three 3160-50 borings. Soil samples were analyzed for pH and results were detected outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at 3160-50-1.

Laboratory results were detected outside acceptable TACO and pH criteria in the sample collected from 3160-50-1 and the soil is classified as uncontaminated but is not eligible for CCDD or USFO management (Table 4-3).

Laboratory results for 3160-50-2 and 3160-50-3 indicate that the soil is within background limits for all criteria and the soil is classified as unrestrictive no special provision will be required.

4.15.5 IDOT Property Acquisition at ISGS #3160-50 Vacant Land

IDOT plans include partial ROW acquisition at ISGS #3160-50 (Vacant Land). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.16 ISGS #3160-51 (UPRR) – 6000 IL-37, Benton Township

4.16.1 Field Observations at ISGS #3160-51 UPRR

Amec Foster Wheeler completed three borings (3160-51-1 through 3160-51-3) at ISGS #3160-51 (UPRR) in accordance with Table 3-1 and Figure 13 and 14. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. In general, one sample (each) was collected from the 0 to 1.5-foot interval. Groundwater was not encountered in ISGS 3160-51.

4.16.2 Analytical Results for ISGS #3160-51 UPRR

No VOCs were detected in soil samples analyzed from borings 3160-51 at concentrations which exceeded any applicable criteria (TACO or MAC). Two SVOCs (benzo(a)pyrene and naphthalene) and several metals were detected in the samples collected at the site above an applicable criteria. Metals were also analyzed via TCLP and SPLP analysis for soils. Soil pH results ranged from 7.8-8.9 SU. Table 4-2 included results for the analytes detected in soil.

4.16.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-51 UPRR

Benzo(a)pyrene was detected at a concentration above some MAC criteria in the soil sample 3160-51-2 (0-1.5').

Naphthalene was detected at a concentration above certain site specific MAC criteria in the 3160-51 soil samples: 1 (0-1.5') and 2 (0-1.5').

Total iron was detected at a concentration above all MAC metal criteria in all samples submitted from 3160-51 borings.

Manganese was detected at a concentration above TCLP and SPLP TACO criteria (only) in the sample 3160-51-1 (0-1.5').

4.16.4 IDOT Construction Activities at ISGS #3160-51 UPRR

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 13 and 14 and Table 2-1.

Excavations associated with these improvements are estimated to extend to a maximum depth of 1.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 13, 14 and 27. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The samples analyzed for pH from 3160-51 borings were within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO.

Laboratory results were detected above criteria for soil collected from 3160-51 borings: 1 and 2. These samples contained one or more COCs above the acceptable range but remain eligible for management to certain CCDD facilities and the soil is considered uncontaminated (Table 4-3).

Laboratory results indicate the soil from 3160-51-3 is classified as unrestrictive and no special provision will be required (Table 4-3).

4.16.5 IDOT Property Acquisition at ISGS #3160-51 UPRR

IDOT plans include a permanent easement at ISGS #3160-51 (UPRR). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with easement acquisition at this location is provided on Table 5-1.

4.17 ISGS #3160-55 (Vacant Land) – 6000 block of IL-37, Browning Township

4.17.1 Field Observations at ISGS #3160-55 Vacant Land

Amec Foster Wheeler completed 2 soil borings (3160-55-1 and 3160-55-2) at ISGS #3160-55 (Vacant Land) in accordance with Table 3-1 and Figure 14. Field evidence of VOCs was not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected to a maximum construction depth of 3' for analysis. Groundwater was not encountered in ISGS 3160-55.

4.17.2 Analytical Results for ISGS #3160-55 Vacant Land

No VOC, SVOC, pesticide or herbicide analytes were detected in any sample submitted to the laboratory above an applicable MAC or TACO criteria. Several metals were detected in soil samples analyzed from borings 3160-55-1 and 3160-55-2; however only iron exceeded any criteria. Table 4-2 includes results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 5.2-8.0 SU.

4.17.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-55 Vacant Land

Iron was detected at a concentration above total metal MAC criteria in the samples submitted from both 3160-55 borings. No other analyte exceeded any criteria.

4.17.4 IDOT Construction Activities at ISGS #3160-55 Vacant Land

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 14 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 3 feet bgs. Assumed areas of impact and COCs are identified in Figures 14 and 27. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings (0.0) were at or below background screening of site soil. The pH result from 3160-55-1 (0-3') soil sample was outside the acceptable range to be considered CCDD eligible. Boring 3160-55-2 contained a pH result within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO.

Laboratory results were detected above MAC and outside the pH criteria for soil sample results collected from boring 3160-55-1 and the soil is classified as uncontaminated and can be managed on-site s fill or off-site to a non-special waste facility (Table 4-3).

Laboratory results indicate boring 3160-55-2 should be classified as unrestrictive soil and does not require a special provision (Table 4-3).

4.17.5 IDOT Property Acquisition at ISGS #3160-55 Vacant Land

IDOT plans include partial ROW acquisition at ISGS #3160-55 (Vacant Land). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.18 ISGS #3160-56 (Agricultural Land) – 7000 block of IL-37, Browning Township

4.18.1 Field Observations at ISGS #3160-56 Agricultural Land

Amec Foster Wheeler completed two borings (3160-56-1 and 3160-56-2) at ISGS #3160-56 (Agricultural Land) in accordance with Table 3-1 and Figure 14. Evidence of VOCs were not observed during PID headspace screening of site soils. Observations during field sampling showed no evidence of discoloration and odors that might suggest potential chemical contamination. One soil sample per boring was collected from ISGS 3160-56 from the 0 to 1.5-foot interval. Groundwater was not encountered in ISGS 3160-56.

4.18.2 Analytical Results for ISGS #3160-56 Agricultural Land

No VOC, pesticide or herbicide analytes were detectable at a concentration exceeding any applicable criteria. One SVOC (naphthalene) was detected in the samples collected from 3160-56 at a concentration above the MAC criteria. Several metals analytes, including TCLP analysis, were above their respective criteria. The Table 4-2 includes results for the analytes detected in soil. Soil pH results ranged from 7.3-8.3 SU.

4.18.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-56 Agricultural Land

Naphthalene was detected at a concentration above certain site-specific MAC criteria in the soil sample 3160-56-2 (0-1.5').

Chromium was detected at a concentration above certain site-specific MAC criteria in the soil sample 3160-56-2 (0-1.5').

Iron was detected at a concentration above certain site-specific MAC criteria in the soil sample 3160-56-2 (0-1.5').

Lead was detected at a concentration above certain site-specific MAC criteria in the soil samples collected from both 3160-56 borings.

Manganese was detected at a concentration above certain site-specific MAC criteria in the soil sample collected from both 3160-56 borings. Manganese was detected at a concentration above the TCLP but below the SPLP TACO criteria in the sample submitted from 3160-56-1 (0-1.5').

No other analytes are considered COCs for 3160-32.

4.18.4 IDOT Construction Activities at ISGS #3160-56 Agricultural Land

Construction activities anticipated at this site include earth work (cut and fill) in accordance with Figure 14 and Table 2-1. Excavations associated with these improvements are estimated to extend to a maximum depth of 1.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 14 and 28. Table 4-4 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil. The pH was reported within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility at all 3160-56 borings.

Laboratory results for soil collected from 3160-56-1 indicate the soils is to be considered unrestricted and no special provision will be required (Table 4-3).

Laboratory results were detected above MAC but below TACO criteria for soil collected from 3160-56-2 and the sample results are acceptable for management to some CCDD facilities (Table 4-3). The soil is classified as uncontaminated (Table 4-3).

4.18.5 IDOT Property Acquisition at ISGS #3160-56 Agricultural Land

IDOT plans include a partial ROW acquisition at ISGS #3160-56 (Agricultural Land). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at these locations is provided on Table 5-1.

4.19 ISGS #3160-62 (UPRR) – 7837 IL-37, 5000 block of IL-37, Frankfort Township and 6000 block of IL-37, Benton Township

4.19.1 Field Observations at ISGS #3160-62 UPRR

Amec Foster Wheeler completed 10 borings (3160-62-1 through 3160-62-10) at ISGS #3160-62 (UPRR) in accordance with Table 3-1 and Figures 16-20. Evidence of VOCs was not observed during PID headspace screening of site soils. One soil sample per boring was collected from ISGS 3160-62 from the 0 to 1.5-foot interval. Groundwater was not encountered at the site.

4.19.2 Analytical Results for ISGS #3160-62 UPRR

No sample analyzed from ISGS 3160-62 contained a VOC or SVOC at a concentration exceeding any MAC or TACO objective. Total metals and one TCLP metal (manganese) were detected in the samples collected at the site at concentrations exceeding one or more MACs and/or TACO objectives. Soil pH result for the samples submitted from 3160-62 borings ranged from 5.2-8.6 SU.

4.19.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-62 UPRR

The total iron concentration from sample 3160-62-8 (0-1.5') exceeded all MAC objectives.

The total lead concentration from sample 3160-62-2 (0-1.25') exceeded the MAC objectives.

The manganese concentration from 3160-62 samples: 5 (0-1.5'), 6 (0-1.5'), 8 (0-1.5') and 10 (0-1.5') exceeded the MAC criterial. Manganese was detected at a concentration in above the TCLP TACO Groundwater Protection objectives in the samples submitted for analysis from 3160-62 borings: 2 (0-1.5') and 8 (0-1.5').

The total selenium concentration from sample 3160-62-8 (0-1.5') exceeded the MAC objectives.

4.19.4 IDOT Construction Activities at ISGS #3160-62 UPRR

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 16-20 and Table 2-1. Excavations are estimated to extend to a maximum depth of 1.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 16-20, 28 and 29. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were not detected during headspace screening of site soil above background concentrations. Soil samples analyzed for pH were detected outside the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at 3160-62 borings: 3, 6, 7, 8, 9 and 10.

Analytical results submitted to the laboratory from soil 3160-62 borings: 2, 4 and 5 indicate that the soil is within applicable criteria and is classified as unrestrictive soil. The soil at 3160-62-2, 3160-62-4, and 3160-62-5 does not require a special provision (Table 4-3).

One or more laboratory results were detected above criteria for soil collected from boring 3160-62-1 at concentrations outside the acceptable range for unrestrictive management and the soil is classified as uncontaminated. The soil is eligible for management to a CCDD facility or USFO (Table 4-3).

One or more laboratory results were detected above criteria for soil collected from 3160-62 borings: 3, 6, 7, 8, 9 and 10 at concentrations outside the acceptable range for management to a CCDD facility or USFO and the soil is considered uncontaminated (Table 4-3).

4.19.5 IDOT Property Acquisition at ISGS #3160-62 UPRR

IDOT plans include a partial ROW acquisition at 3160-62 (UPRR). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

4.20 ISGS #3160-64 (Residence) – 6229 IL-37, Benton Township

4.20.1 Field Observations at ISGS #3160-64 Residence

Amec Foster Wheeler completed three borings (3160-64-1 through 3) at ISGS #3160-64 Residence in accordance with Table 3-1 and Figure 18. In accordance with the approved work plan, soil samples were collected from ISGS 3160-64 borings for laboratory analysis of VOCs, SVOCs, metals, TCLP Metals and SPLP metals.

Field evidence of VOCs was not observed during PID headspace screening of site soils from any boring. Observations during field sampling did not show any evidence of discoloration or odors that might suggest potential chemical contamination. Soil samples were collected from the 0-1.5' interval for analysis. One soil sample per boring was collected from ISGS 3160-64. Groundwater was not encountered in ISGS 3160-64.

4.20.2 Analytical Results for ISGS #3160-64 Residence

No VOC analytes were detected above applicable criteria in soil samples analyzed from borings 3160-64. Several SVOCs and one metal were detected in the samples collected at the site at a concentration exceeding a criterion. Table 4-2 included results for the analytes detected in soil. Metals were also analyzed via TCLP and SPLP analysis. Soil pH results ranged from 7.1-8.2 SU.

4.20.3 Nature and Extent of Contamination Above Applicable Criteria at ISGS #3160-64 Residence

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and naphthalene were detected at concentrations above some of their respective MAC criteria in sample 3160-64-1 (0-1.5'). No other SVOC exceeded any applicable criteria.

Lead was detected at a concentration above total metals MAC and TCLP TACO criteria from the 3160-64 samples: 1 (0-1.5') and 3 (0-1.5'). No other metal is considered a COC for 3160-64.

4.20.4 IDOT Construction Activities at ISGS #3160-64 Residence

Construction activities anticipated at this site include excavation (cut and fill) in accordance with Figure 18 and Table 2-1. Excavations are estimated to extend to a maximum depth of 1.5 feet bgs. Assumed areas of impact and COCs are identified in Figures 18 and 29. Table 4-5 presents an estimated volume of impacted soil within proposed construction excavation areas at the site that will require proper handling and disposal if removed from the site. When provided, Amec Foster Wheeler used volumes provided by IDOT District 9 to estimate impacted soil quantities.

PID readings were detected during headspace screening of site soil in the 3160-64 borings. Soil samples were analyzed for pH and results were detected within the acceptable range (6.25-9.0) for management of the soil at a CCDD facility or USFO at all 3160-64 borings.

Laboratory results were detected outside acceptable MAC, and TACO criteria in the sample submitted from 3160-64-1 (0-1.5') and the soil is classified as CCDD eligible with limited availability (Table 4-3).

Laboratory results from the sample 3160-64-2 and 3160-64-3 indicate the soil is unrestrictive and no special provision will be required.

4.20.5 IDOT Property Acquisition at ISGS #3160-64 Residence

IDOT plans include partial ROW acquisition at ISGS #3160-64 (Residence). If off-site management of soils is required, the estimated volume and costs of impacted soil associated with property acquisition at this location is provided on Table 5-1.

5.0 Conclusions and Recommendations

Amec Foster Wheeler's investigation has identified the presence of COCs in project area soils. The following sections summarize investigation findings and provides recommendations for classification and management of impacted soil and groundwater based on comparison with MAC and TACO Tier 1 ROs.

Amec Foster Wheeler's field investigation was designed to provide an initial characterization of site conditions at pre-designated boring locations. The investigation, limited in terms of analytical parameters and the number of samples collected, was based on the known history of the properties. Consequently, the findings and conclusions of this investigation are subject to revision should more site data become available.

Soil removed from outside Amec Foster Wheeler's investigation area that is observed to exhibit discoloration or odors indicative of contamination should be sampled to determine the proper disposal classification.

It should be noted, total iron (a naturally occurring and ubiquitous metal in soil) was detected in nearly every PESA location at a concentration in excess of the MAC criteria. Soils containing total iron (only) in excess of MAC criteria are considered unrestricted in the absence of any other contaminant of concern. In addition, soil pH ranges have been noted by the NRCS for the Bonnie, Cisne, and Wynoose silt loams ranging from 3.5 to 7.3 S.U. The pH results for the samples analyzed during this investigation appear consistent with previous reporting of the NRCS. Although numerous samples contain a pH value outside the range for acceptance at a CCDD facility (6.25-9.0 S.U.) the pH results appear to be natural.

5.1 Estimated Soil Management Volumes and Costs

5.1.1 ISGS #3160-5 (UPRR) – Soil Management

Arsenic, iron, lead and pH were identified as COCs at ISGS #3160-5. The pH levels were between 6.1 and 8.6 SU and no VOCs were detectable during the headspace readings.

Soils associated with borings 3160-5-1 and 3160-5-3 may be utilized on-site as fill within the construction limits or may be managed by a CCDD facility based on the laboratory analytical results. Soil associated with these borings does not require a special provision.

Soil associated with boring 3160-5-2 is considered uncontaminated but is not eligible for CCDD management based on the laboratory analytical results. If it cannot be utilized on-site, then it shall be disposed of off-site. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to a laboratory detection outside acceptable limits for CCDD facilities.

5.1.1.1 ISGS #3160-5 (UPRR) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 314 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from UPRR area 3160-5 is \$66,811.

5.1.2 ISGS #3160-8 (J.W. Reynolds Memorial) – Soil Management

Manganese was identified as COCs at ISGS #3160-8 (J.W. Reynolds Memorial). The pH levels were within the acceptable range and no VOCs were detectable during the headspace readings.

Soils associated with borings 3160-8-1 and 2 may be utilized on-site as fill within the construction limits or may be managed by a CCDD facility based on the laboratory analytical results. Soil associated with these borings does not require a special provision.

5.1.2.1 ISGS #3160-8 (J.W. Reynolds Memorial) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 0 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the J.W. Reynolds Memorial area 3160-8 is \$6,319.

5.1.3 ISGS #3160-9 (C.N.C. Guns & Ammo) – Soil Management

Iron, manganese and pH were identified as COCs at ISGS #3160-9 (C.N.C. Guns & Ammo). The pH levels exceeded acceptable limits at boring: 3160-9-1 and 3160-9-2. VOCs were not detectable during the headspace readings.

Soil in the vicinity of borings 3160-9-1 and 3160-9-2 shall be managed and disposed of offsite as uncontaminated waste at a non-special waste facility. A “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to pH readings outside acceptable limits for CCDD facilities.

Soil near boring 3160-9-3 is unrestricted and requires no special provision.

5.1.3.1 ISGS #3160-9 (C.N.C. Guns & Ammo) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are is shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 430 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the C.N.C. Guns & Ammo area 3160-9 is \$45,795.

5.1.4 ISGS #3160-10 (Benton Grade School District #47) – Soil Management

Benzene, naphthalene, magnesium and iron were identified as COCs at ISGS #3160-10 (Benton Grade School District #47). The pH levels were below the acceptable range from samples collected from borings: 10-1 and 10-2. VOCs were detected during the headspace readings in all three 3160-10 borings.

Soils associated with borings 3160-10-1 through 3 shall be disposed of off-site as non-special waste providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to laboratory detections, PID field screening and pH readings outside acceptable limits for CCDD facilities.

5.1.4.1 ISGS #3160-10 (Benton Grade School District #47) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are is shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 800 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from Benton Grade School District #47 area 3160-10 is \$56,800.

5.1.5 ISGS #3160-16 (Residential Property) – Soil Management

2-methylnaphthalene, naphthalene, iron, manganese and pH were identified as COCs at ISGS #3160-16 (Residential Property). The pH levels were outside the acceptable range but no VOCs were detectable during the headspace readings.

Boring 3160-16-1 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results and requires no special provision.

Soils associated with boring 3160-16- 2, 3 and 5 may be utilized on-site as fill within the construction limits. If soil near borings 3160-16-2, 3160-16-3, and 3160-16-5 cannot be utilized on-site, then it shall be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to laboratory detections outside acceptable limits for CCDD facilities.

Boring 3160-16-4 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results.

5.1.5.1 ISGS #3160-16 (Residential Property) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 1,972 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Residential area 3160-16 is \$175,015.

5.1.6 ISGS #3160-21 (UPRR) – Soil Management

Naphthalene, 2-methylnaphthalene, chromium, iron, and manganese were identified as COCs at ISGS #3160-21. The pH levels were between 5.5 and 8.3 SU and no VOCs were detectable during the headspace readings.

Soils associated with boring 3160-21-6 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to a laboratory detection outside acceptable limits for CCDD facilities.

Borings 3160-21-2 and 3160-21-10 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results.

Soil in association with 3160-21 borings: 1, 3, 4, 5, 7, 8 and 9 considered unrestrictive and require no special provision.

5.1.6.1 ISGS #3160-21 (UPRR) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are is shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 519 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from UPRR area 3160-21 is \$184,174.

5.1.7 ISGS #3160-23 (Vacant Land) – Soil Management

Naphthalene and 2-methylnaphthalene were identified as COCs at ISGS #3160-23 (Vacant Land). One pH level was below the acceptable range and no VOCs were detectable during the headspace readings.

Soil associated with boring 3160-23-1 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to laboratory detections.

Soil associated with boring 3160-23-2 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results.

5.1.7.1 ISGS #3160-23 (Vacant Land) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 80 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Vacant Land area 3160-23 is \$5,680.

5.1.8 ISGS #3160-25 (Commercial Building and Residence) – Soil Management

Iron, manganese and pH were identified as COCs at ISGS #3160-25 (Commercial Building and Residence). The pH levels were below the acceptable range at both 3160-25 borings. VOCs were not detectable during the headspace readings.

Soil associated with both 3160-25 borings may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates that although the soil is classified as uncontaminated, disposal off-site to a non-special waste disposal facility is required due to laboratory detections outside acceptable limits for CCDD facilities.

5.1.8.2 ISGS #3160-25 (Commercial Building and Residence) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 473 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Commercial Building and Residence area 3160-25 is \$33,583.

5.1.9 ISGS #3160-26 (Residence) – Soil Management

Iron, manganese and pH were identified as COCs at ISGS #3160-26 (Residence). The pH levels were outside the acceptable range from samples collected from both 3160-26 borings; however, no VOCs were detectable during the headspace readings.

Soil associated with both 3160-26 borings may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be disposed of off-site to a non-special waste facility providing

that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates that although the soil is classified as uncontaminated, disposal off-site to a non-special waste disposal facility is required due to laboratory detections outside acceptable limits for CCDD facilities.

5.1.9.1 ISGS #3160-26 (Residence) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 138 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from Residence area 3160-26 is \$9,800.

5.1.10 ISGS #3160-28 (Residence) – Soil Management

Iron, manganese, naphthalene and selenium were identified as COCs at ISGS #3160-28 (Residence). The pH levels were all outside the acceptable range and no VOCs were detectable during the headspace readings.

Soils associated with all three 3160-28 borings may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate although the soil is classified as uncontaminated, a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to laboratory detections (pH) outside acceptable limits for CCDD facilities.

5.1.10.1 ISGS #3160-28 (Residence) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 479 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Residential area 3160-28 is \$34,010.

5.1.11 ISGS #3160-32 (Route 37 Collection Center) – Soil Management

Naphthalene, 2-methylnaphthalene, benzo(a)pyrene, iron, manganese, cobalt and pH were identified as COCs at ISGS #3160-32. The pH levels were between 4.6 and 6.7 SU and no VOCs were detectable during the headspace readings.

Soils associated with all 3160-32 borings may be utilized on-site as fill within the construction limits. If borings 3160-32-5 through 3160-31-7 cannot be utilized on-site, then the soil shall be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to a laboratory detection outside acceptable limits for CCDD facilities.

Boring 3160-32-4 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results.

Borings 3160-32-1 through 3160-32-3 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results. Soil is also classified as unrestrictive and requires no special provision.

5.1.11.1 ISGS #3160-32 (Route 37 Collection Center) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 514 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from Route 37 Collection Center area 3160-32 is \$63,900.

5.1.12 ISGS #3160-36 (UPRR) – Soil Management

Benzo(a)pyrene, 2-methylnaphthalene, naphthalene, cobalt, iron, lead and manganese were identified as COCs at ISGS #3160-36 (UPRR). The seven of the 11 pH levels were outside the acceptable range for management at a CCDD facility and no VOCs were detectable during the headspace readings.

Soils associated with borings 3160-36-4 and 9 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be disposed of off-site as non-special waste providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to laboratory detections.

Soils associated with 3160-36 borings: 2, 3, 5, 6, 7, and 11 can be managed on site. If soil is not able to be managed on-site, soil shall be managed and disposed of offsite as an uncontaminated substance at a non-special waste facility due to pH exceeding the CCDD soil criteria. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to laboratory detections.

Soil in the vicinity of 3160-36 borings: 1, 8 and 10 is classified as unrestrictive and does not require any special provision.

5.1.12.1 ISGS #3160-36 (UPRR) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 2,324 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the UPRR area 3160-36 is \$226,880.

5.1.13 ISGS #3160-45 (Residence) – Soil Management

Cobalt, iron and manganese were identified as COCs at ISGS #3160-45 (Residence). The pH levels were within acceptable limits for all samples submitted for analysis at 3160-45. VOCs were not detectable during the headspace readings in any boring.

All borings (3160-45-1 through 3160-45-4) may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results. No special provision will be required.

5.1.13.1 ISGS #3160-45 (Residence) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the construction excavation quantities provided by the IDOT district and analytical results, 0 cubic yards of soil at the site

may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Residence area 3160-45 is \$61,700.

5.1.14 ISGS #3160-50 (Vacant Land) – Soil Management

Chromium, manganese and iron were identified as COCs at ISGS #3160-50 (Vacant Land). The pH level for the sample from 3060-50-1 was outside the acceptable range for management at a CCDD facility. No VOCs were detectable during the headspace readings.

Based on the soil analytical data, all three borings from the 3160-50 site may be managed on-site to be utilized as fill within the construction limits. If the soil cannot be utilized on-site then soil near borings 3160-50-2 and 3160-50-3 may be managed by a CCDD facility based on the laboratory analytical results. Soil is classified as unrestrictive and requires no special provision.

Soils associated with boring 3160-50-1 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be classified as uncontaminated soil and be disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to a laboratory detections and pH readings outside acceptable limits for CCDD facilities.

5.1.14.1 ISGS #3160-50 (Vacant Land) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 18 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from Vacant Land area 3160-50 is \$3,900.

5.1.15 ISGS #3160- 51 (UPRR) – Soil Management

Benzo(a)pyrene, naphthalene, iron and lead were identified as COCs at ISGS #3160-51 (UPRR). The pH levels were acceptable and no VOCs were detectable during the headspace readings.

Soils associated with boring 3160-51- 1 and 2 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be managed by a CCDD facility based on the laboratory analytical results.

Soil associated with the sample collected from boring 3160-51-3 did not contain any laboratory analyte above an applicable criterion and the soil is classified as unrestrictive. No special provision is required.

5.1.15.1 ISGS #3160-51 (UPRR) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 0 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Residential area 3160-51 is \$97,057.

5.1.16 ISGS #3160-55 (Agricultural Land) – Soil Management

Iron and pH were identified as COCs at ISGS #3160-55. The pH level of 3160-55-1 was 5.2, which is outside the acceptable range for management to a CCDD facility. The pH level of 3160-55-2 was 8.0, which is within the acceptable range. No VOCs were detectable during the headspace readings.

Soils associated with boring 3160-55-1 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be classified as uncontaminated soil and disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to a laboratory detection outside acceptable limits for CCDD facilities.

The other 3160-55 boring (3160-55-2) is classified as unrestrictive and does not require any special provision based on the laboratory analytical results.

5.1.16.1 ISGS #3160-55 (Agricultural Land) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 197 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from Agricultural Land area 3160-55 is \$27,974.

5.1.17 ISGS #3160-56 (Agricultural Land) – Soil Management

Naphthalene, chromium, iron, lead and manganese were identified as COCs at ISGS #3160-56 (Agricultural Land). The pH levels were within the acceptable range for management to a CCDD facility and no VOCs were detectable during the headspace readings.

Boring 3160-56-1 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results. No special provision is required.

Boring 3160-56-2 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results.

5.1.17.1 ISGS #3160-56 (Agricultural Land) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 0 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the Agricultural Land area 3160-56 is \$13,064.

5.1.18 ISGS #3160-62 (UPRR) – Soil Management

Naphthalene, iron, lead, manganese, selenium and pH were identified as COCs at ISGS #3160-62 (UPRR). The pH levels were outside the acceptable limits for management at a CCDD facility at 3160-62 borings: 3, 6, 7, 8, 9 and 10. VOCs were not detectable during the headspace readings in any boring.

Soils associated with 3160-62 borings: 3, 6, 7, 8, 9 and 10 may be utilized on-site as fill within the construction limits. If it cannot be utilized on-site, then it shall be classified as uncontaminated soil and disposed of off-site to a non-special waste facility providing that a “non-special waste certification” is submitted by the generator subject to the conditions of 415 ILCS 5/22.48 and 415 ILCS 5/3.475. The

property history and available analytical data indicate a “non-special waste certification” can be applied to soil anticipated to be excavated adjacent to and within this property during construction activities. Analytical data indicates disposal off-site to a non-special waste disposal facility is required due to a laboratory detection outside acceptable limits for CCDD facilities.

Soil associated with boring 3160-62-1 may either be managed on-site as fill material within the construction limits or may be managed by a CCDD facility based on the laboratory analytical results.

Soil associated with borings 3160-62-2, 3160-62-4 and 3160-62-5 may either be managed on-site as fill material within the construction limits or may be managed by a CCDD facility based on the laboratory analytical results. No special provision is required for these borings.

5.1.18.2 ISGS #3160-62 (UPRR) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 866 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from the UPRR area 3160-62 is \$102,453.

5.1.19 ISGS #3160-64 (Residence) – Soil Management

Benzo(a)anthracene, benzo(a)pyrene, benzo(a)fluoranthene, dibenz(a,h)anthracene, naphthalene, lead and manganese were identified as COCs at ISGS #3160-64 (Residence). The pH levels were within the acceptable range for management to a CCDD facility from all samples collected from 3160-64. No VOCs were detectable during the headspace readings.

Boring 3160-64-1 may either be managed on-site or may be managed by a CCDD facility based on the laboratory analytical results.

Soil associated with boring 3160-64-2 and 3061-64-3 are classified as unrestrictive and requires no special provision.

5.1.19.1 ISGS #3160-64 (Residence) – Soil Volume and Cost: Construction Area

Costs estimated for the off-site disposal of impacted soils are shown in Table 5-1. Based on the provided construction excavation quantities provided by the IDOT district and analytical results, 62 cubic yards of soil at the site may require off-site disposal to a special waste disposal facility (Table 5-1). Estimated cost for off-site disposal (non-special waste and CCDD) of impacted soils from Residence area 3160-64 is \$13,270.

5.2 Soil Management Areas and Applicable Regulations

5.2.1 ISGS #3160-5 (UPRR)

Station 12+00, 0’ to 50’ LT to Station 14+00, 0’ to 50’ LT (UPRR, PESA site 3160-5, 1400 block South Main Street, Benton; boring 3160-5-2) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron and pH.

5.2.2 ISGS #3160-8 (J.W. Reynolds Memorial)

No special provisions are required for 3160-8.

5.2.3 ISGS #3160-9 (C.N.C. Guns & Ammo)

Station 0+0, 0’ to 50’ RT to Station 1+25, 0’ to 47’ RT (C.N.C. Guns & Ammo, PESA site 3160-9, 1401 S. Main Street, Benton; borings 3160-9-1 and 2) - The material meets the criteria of Article 669.09(b) and

shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

5.2.4 ISGS #3160-10 (Benton Grade School District #47)

Station 1+75, 0' to 50' RT to Station 3+90, 0' to 55' LT (Benton Grade School District #47, PESA site 3160-10, 1403 South Main Street, Benton; borings 3160-10-1 through 3) - The material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters include: benzene, naphthalene, iron, manganese and pH.

5.2.5 ISGS #3160-16 (Residential Property)

Station 10+40, 0' to 35' RT to Station 11+70, 0' to 190' RT (Residential Property, PESA site 3160-16, 12574 South Park Road, Benton Township; borings 3160-16-2 and 3) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron and pH.

Station 12+15, 0 to 65' RT to Station 14+00, 0 to 45' RT (Residential Property, PESA site 3160-16, 12574 South Park Road, Benton Township; boring 3160-16-4) - The soil at 3160-16 boring 4 meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters include: 2-methylnaphthalene, naphthalene, iron and pH.

Station 14+00, 0 to 45' RT to Station 15+40, 0 to 55' RT (Residential Property, PESA site 3160-16, 12574 South Park Road, Benton Township; borings 3160-16-5) - The soil at 3160-16 boring 5 meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: 2-methylnaphthalene, naphthalene, iron and pH.

5.2.6 ISGS #3160-21 (UPRR)

Station 30+00, 0' to 50' LT to Station 31+25, 0' to 50' LT (UPRR Property, PESA site 3160-21, 7000 block IL-37, Benton Township; boring 3160-21-2) - The material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters include: 2-methylnaphthalene, naphthalene, manganese and iron.

Station 37+25, 0 to 50' LT to Station 39+25, 0 to 50' LT (UPRR Property, PESA site 3160-21, 7000 block IL-37, Benton Township; boring 3160-21-6) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron and pH.

Station 45+45, 0' to 65' LT to Station 46+55, 0' to 40' LT (UPRR Property, PESA site 3160-21, 7000 block IL-37, Benton Township; boring 3160-21-10) - The material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance with Article 669.09. COC sampling parameters include: naphthalene and iron.

5.2.7 ISGS #3160-23 (Vacant Land)

Station 22+00, 0' to 65' RT to Station 23+00, 0' to 65' RT (Vacant Land, PESA site 3160-23, 7000 block IL-37, Benton Township; 3160-23-1) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: pH.

Station 23+00, 0' to 65' RT to Station 24+00, 0' to 65' RT (Vacant Land, PESA site 3160-23, 7000 block IL-37, Benton Township; 3160-23-2) - The material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters include: 2-methylnaphthalene and naphthalene.

5.2.8 ISGS #3160-25 (Commercial Building and Residence)

Station 30+75, 0' to 50' RT to Station 32+75, 0' to 50' RT (Commercial Building and Residence, PESA site 3160-25, 7837 IL-37, Benton Township; borings 3160-25-1 and 2) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

5.2.9 ISGS #3160-26 (Residence)

Station 32+75, 0' to 50' RT to Station 34+75, 0' to 60' LT (Residence, PESA site 3160-26, (7789 IL-37, Benton Township; borings 3160-26-1 and 2) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

5.2.10 ISGS #3160-28 (Residence)

Station 35+75, 0' to 45' RT to Station 37+75, 0' to 55' RT (Residential Property, PESA site 3160-28, 7745 IL-37, Benton Township; borings 3160-28-1 and 2) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

Station 37+75, 0' to 55' RT to Station 38+75, 0' to 55' RT (Residential Property, PESA site 3160-28, 7745 IL-37, Benton Township; boring 3160-28-3) - The material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: naphthalene, iron, manganese, selenium and pH.

5.2.11 ISGS #3160-32 (Route 37 Collection Center)

Station 45+50, 0' to 65' RT to Station 46+50, 0' to 65' RT (Route 37 Collection Center, PESA site 3160-32, 7533 IL-37, Benton Township; boring 3160-32-4) - The material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters include: 2-methylnaphthalene, naphthalene, iron.

Station 46+50, 0' to 65' RT to Station 49+50, 0' to 65' RT (Route 37 Collection Center, PESA site 3160-32, 7533 IL-37, Benton Township; borings 3160-32-5 through 7) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

5.2.12 ISGS #3160-36 (UPRR)

Station 50+50, 0' to 45' LT to Station 55+50, 0' to 40' LT (UPRR, PESA site 3160-36, PESA site 3160-36, 6000-7000 blocks of IL-37, Benton Township; boring 3160-36-2 and 3) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

Station 55+50, 0' to 40' LT to Station 57+25, 0' to 45' LT (UPRR, PESA site 3160-36, PESA site 3160-36, 6000-7000 blocks of IL-37, Benton Township; boring 3160-36-4) - The material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

Station 57+25, 0' to 45' LT to Station 63+00, 0' to 50' LT (UPRR, PESA site 3160-36, PESA site 3160-36, 6000-7000 blocks of IL-37, Benton Township; borings 3160-36-5 through 7) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese, pH.

Station 71+75, 0' to 40' LT to Station 72+75, 0' to 40' LT (UPRR, PESA site 3160-36, PESA site 3160-36, 6000-7000 blocks of IL-37, Benton Township; boring 3160-36-9) - The material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters include: benzo(a)pyrene, 2-methylnaphthalene, naphthalene, iron, lead, manganese.

Station 75+75, 0' to 40' LT to Station 77+00, 0' to 40' LT (UPRR, PESA site 3160-36, PESA site 3160-36, 6000-7000 blocks of IL-37, Benton Township; boring 3160-36-11) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese and pH.

5.2.13 ISGS #3160-45 (Residence)

No special provisions are required for 3160-45.

5.2.14 ISGS #3160-50 (Vacant Land)

Station 75+50, 0' to 60' RT to Station 76+, 0' to 75' RT (Vacant Land, PESA site 3160-50, 6000 block of IL-37, Benton Township; boring 3160-50-1) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: manganese and pH.

5.2.15 ISGS #3160-51 (UPRR)

Station 81+00, 0' to 55' LT to Station 84+25, 0' to 35' LT (Residential Property, PESA site 3160-51, 6000 block of IL-37, Benton Township; boring 3160-51-1 and 2) - The material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance with Article 669.09. COC sampling parameters include: benzo(a)pyrene, naphthalene, iron, lead.

5.2.16 ISGS #3160-55 (UPRR)

Station 87+00, 0' to 55' RT to Station 88+00, 0' to 55' RT (UPRR, PESA site 3160-55, 6000 block of IL-37, Browning Township; boring 3160-55-1) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron and pH.

5.2.17 ISGS #3160-56 (Agricultural Land)

Station 90+00, 0' to 55' RT to Station 91+00, 0' to 45' RT (Agricultural Land, PESA site 3160-56, 6000 block of IL-37, Browning Township; boring 3160-56-2) - The material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance with Article 669.09. COC sampling parameters include: naphthalene, chromium, iron, lead and manganese.

5.2.18 ISGS #3160-62 (UPRR)

Station 104+0, 0' to 35' LT to Station 105+50, 0' to 35' LT (UPRR, PESA site 3160-62, 5000 block of IL-37, Frankfort Township and 6000 block of IL-37, Benton Township; boring 3160-62-1) - The material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance with Article 669.09. COC sampling parameters include: naphthalene and manganese.

Station 112+0, 0' to 40' LT to Station 113+50, 0' to 40' LT (UPRR, PESA site 3160-62, 5000 block of IL-37, Frankfort Township and 6000 block of IL-37, Benton Township; borings 3160-62-3) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: pH.

Station 117+50, 0' to 40' LT to Station 128+00, 0' to 40' LT (UPRR, PESA site 3160-9, 5000 block of IL-37, Frankfort Township and 6000 block of IL-37, Benton Township; borings 3160-62-6 through 10) - The material meets the criteria of Article 669.09(b) and shall be managed in accordance with Article 669.09. COC sampling parameters include: iron, manganese, selenium and pH.

5.2.19 ISGS #3160-64 (Residence)

Station 115+50, 0' to 50' RT to Station 116+55, 0' to 50' RT (Residence, PESA site 3160-64, 6229 IL-37, Benton Township; boring 3160-64-1) - The material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters include: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, naphthalene, lead.

5.3 Recommendations

5.3.1 Additional Investigations

Based on site history, field observations, and analytical results, Amec Foster Wheeler does not recommend further investigation for this project. Soil in the project area has been characterized with regard to IDOT construction activities. Additional sampling may be required should construction excavation activities extend beyond the previously investigated area and/or if soil or groundwater is encountered that exhibits odor or discoloration indicative of contamination.

5.3.2 Prevention of Accelerated Contaminant Migration

Soil containment and storm water runoff control measures are recommended to minimize the potential migration of contaminants from any impacted soils that are stockpiled at the sites. If soil must be stockpiled, it should be stored in lined and covered roll-off boxes or segregated from other soils on storage pads designed to prevent migration of contaminants to un-impacted areas.

Groundwater is not anticipated to be encountered during construction excavation, based on observations during the investigation and the maximum proposed excavation depths at the sites. If groundwater is encountered, it should be properly characterized. Due to the transmissive property of the geologic material and lack of observed groundwater, it is the professional opinion of Amec Foster Wheeler that any observed groundwater should be manageable within the excavation through natural drainage.

5.3.3 Comparison of Detected Soil Concentrations with TACO Tier 1 Remediation Objectives for Construction Worker Exposure

The COCs detected in site soil were compared with TACO Tier 1 ROs for construction worker exposure. Analytical results from all samples collected throughout the proposed excavation area are below the applicable TACO Tier 1 Remediation Objectives for Construction Worker Exposure. However, if soil unearthed during excavation activities exhibits PID readings, odors, or discoloration indicative of contamination, Amec Foster Wheeler recommends that the soil be sampled to determine appropriate worker protection measures during construction activities. The health and safety of construction workers are the sole responsibility of the construction contractor, and Occupational Safety and Health Administration (OSHA) regulations should be adhered to during all construction activities.

managed in accordance with Article 669.09. COC sampling parameters include: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, naphthalene, lead.

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**Table 2-1. Summary of Recognized Environmental Conditions, Planned Construction Activities, and Contaminants of Concern
FAS 2882/IL 37
Benton, Franklin County, Illinois**

| PESA Site Name | Recognized Environmental Conditions (RECs) | Planned Construction Activities | Contaminants of Concern** | Investigation Objectives/Rationale | Planned Property Acquisition |
|----------------|---|---------------------------------|--|---|-----------------------------------|
| 3160-5 | Railroad signal boxes | Cut and fill | Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 1.2 feet | Permanent Easement |
| 3160-8 | Potential UST(s), potential former chemical use | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 3 feet | ROW Partial Take |
| 3160-9 | Potential UST(s), potential former chemical use, transformers | Cut and fill | VOCs, SVOCs, Metals*, PCBs | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 4 feet | ROW Partial Take |
| 3160-10 | Potential UST(s), potential former chemical use | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 2.5 feet | ROW Partial Take |
| 3160-16 | ASTs, natural gas pipeline | Cut and fill | VOCs, SVOCs, Pesticides, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 4 feet | ROW Partial Take |
| 3160-21 | Fill, petroleum pipeline, railroad signal box | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 2.5 feet | Temporary and Permanent Easements |
| 3160-23 | Former ASTs, evidence of former chemical use, natural gas pipeline, likely past pesticide and/or herbicide use | Cut and fill | VOCs, SVOCs, Metals*, Pesticides, Herbicides | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 4.5 feet | ROW Partial Take |
| 3160-25 | Potential UST(s), former ASTs, drums, evidence of former chemical use, solid waste, likely natural gas pipeline | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 4 feet | ROW Partial Take |
| 3160-26 | Petroleum pipeline, likely natural gas pipeline | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 4 feet | ROW Partial Take |
| 3160-28 | Potential UST(s), potential former chemical use, natural gas pipeline | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 5 feet | ROW Partial Take |
| 3160-32 | Potential UST(s), ASTs, drums; evidence of former chemical use, solid waste, natural gas pipeline | Cut and fill | VOCs, SVOCs, Metals*, PCBs | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 3.5 feet | ROW Partial Take |
| 3160-36 | Fill, petroleum pipeline, railroad signal box | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 3 feet | ROW Partial Take |
| 3160-45 | Evidence of former chemical use, transformer, natural gas pipeline | Cut and fill | VOCs, SVOCs, Metals*, PCBs | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 6 feet | ROW Partial Take |
| 3160-50 | Evidence of former chemical use, former ASTs, likely natural gas pipeline | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 2 feet | ROW Partial Take |
| 3160-51 | Fill, petroleum pipeline, railroad signal box | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 1.5 feet | Permanent Easement |
| 3160-55 | Evidence of former chemical use, natural gas pipeline, likely past pesticide and/or herbicide use | Cut and fill | VOCs, SVOCs, Metals*, Pesticides, Herbicides | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 3 feet | ROW Partial Take |
| 3160-56 | Evidence of former chemical use, natural gas pipeline, likely past pesticide and/or herbicide use | Cut and fill | VOCs, SVOCs, Metals*, Pesticides, Herbicides | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 1.5 feet | ROW Partial Take |
| 3160-62 | Fill, railroad signal box | Cut and fill | VOCs, SVOCs, Metals* | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 1.5 feet | Temporary Easement |
| 3160-64 | AST, natural gas pipeline, transformer | Cut and fill | VOCs, SVOCs, Metals*, PCBs | Investigate the soil and groundwater in the proposed construction area Maximum construction depth 1.5 feet | ROW Partial Take |

*Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, and Mercury

**All soil samples will be analyzed for pH.

Table 3-1. Summary of Sampling and Analysis Program

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Borings | Offset from Proposed Location | Boring Depth (feet) | Sample(s) | Matrix | Parameters |
|---|-------------------------------|---------------------|---------------------|--------|--|
| ISGS #3160-5 (UPRR) | | | | | |
| 3160-5-1 | None | 5.0 | 3160-5-1 (0-1.2') | Soil | Total, TCLP, and SPLP Metals |
| 3160-5-2 | None | 5.0 | 3160-5-2 (0-1.2') | Soil | Total, TCLP, and SPLP Metals |
| 3160-5-3 | None | 5.0 | 3160-5-3 (0-1.2') | Soil | Total, TCLP, and SPLP Metals |
| ISGS #3160-8 (J.W. Reynolds Memorial) | | | | | |
| 3160-8-1 | None | 5.0 | 3160-8-1 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-8-2 | None | 5.0 | 3160-8-2 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-9 (C.N.C Guns and Ammo) | | | | | |
| 3160-9-1 | None | 5.0 | 3160-9-1 (0-4') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-9-2 | None | 5.0 | 3160-9-2 (0-4') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-9-3 | None | 5.0 | 3160-9-3 (0-4') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| ISGS #3160-10 (Benton Grade School District #47) | | | | | |
| 3160-10-1 | None | 5.0 | 3160-10-1 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-10-2 | None | 5.0 | 3160-10-2 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-10-3 | None | 5.0 | 3160-10-3 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-16 (Residence) | | | | | |
| 3160-16-1 | None | 5.0 | 3160-16-1 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-16-2 | None | 5.0 | 3160-16-2 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-16-3 | None | 5.0 | 3160-16-3 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-16-4 | None | 5.0 | 3160-16-4 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-16-5 | None | 5.0 | 3160-16-5 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-21 (UPRR) | | | | | |
| 3160-21-1 | None | 5.0 | 3160-21-1 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-2 | None | 5.0 | 3160-21-2 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-3 | None | 5.0 | 3160-21-3 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-4 | None | 5.0 | 3160-21-4 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-5 | None | 5.0 | 3160-21-5 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-6 | None | 5.0 | 3160-21-6 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-7 | None | 5.0 | 3160-21-7 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-8 | None | 5.0 | 3160-21-8 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-9 | None | 5.0 | 3160-21-9 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-21-10 | None | 5.0 | 3160-21-10 (0-2.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |

See last page for footnotes.

Table 3-1. Summary of Sampling and Analysis Program

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Borings | Offset from Proposed Location | Boring Depth (feet) | Sample(s) | Matrix | Parameters |
|--|-------------------------------|---------------------|--------------------|--------|---|
| ISGS #3160-23 (Vacant Land) | | | | | |
| 3160-23-1 | None | 5.0 | 3160-23-1 (0-4.5') | Soil | VOCs/SVOCs/Pest./Herb./Total, TCLP, and SPLP Metals |
| 3160-23-2 | None | 5.0 | 3160-23-2 (0-4.5') | Soil | VOCs/SVOCs/Pest./Herb./Total, TCLP, and SPLP Metals |
| ISGS #3160-25 (Commercial Building and Residence) | | | | | |
| 3160-25-1 | None | 5.0 | 3160-25-1 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-25-2 | None | 5.0 | 3160-25-2 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-26 (Residence) | | | | | |
| 3160-26-1 | None | 5.0 | 3160-26-1 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-26-2 | None | 5.0 | 3160-26-2 (0-4') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-28 (Residence) | | | | | |
| 3160-28-1 | None | 5.0 | 3160-28-1 (0-5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-28-2 | None | 5.0 | 3160-28-2 (0-5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-28-3 | None | 5.0 | 3160-28-3 (0-5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-32 (Route 37 Collection Center) | | | | | |
| 3160-32-1 | None | 5.0 | 3160-32-1 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-32-2 | None | 5.0 | 3160-32-2 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-32-3 | None | 5.0 | 3160-32-3 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-32-4 | None | 5.0 | 3160-32-4 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-32-5 | None | 5.0 | 3160-32-5 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-32-6 | None | 5.0 | 3160-32-6 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-32-7 | None | 5.0 | 3160-32-7 (0-3.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| ISGS #3160-36 (UPRR) | | | | | |
| 3160-36-1 | None | 5.0 | 3160-36-1 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-2 | None | 5.0 | 3160-36-2 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-3 | None | 5.0 | 3160-36-3 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-4 | None | 5.0 | 3160-36-4 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-5 | None | 5.0 | 3160-36-5 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-6 | None | 5.0 | 3160-36-6 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-7 | None | 5.0 | 3160-36-7 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-8 | None | 5.0 | 3160-36-8 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-9 | None | 5.0 | 3160-36-9 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-10 | None | 5.0 | 3160-36-10 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-36-11 | None | 5.0 | 3160-36-11 (0-3') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |

See last page for footnotes.

Table 3-1. Summary of Sampling and Analysis Program

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Borings | Offset from Proposed Location | Boring Depth (feet) | Sample(s) | Matrix | Parameters |
|---|-------------------------------|---------------------|---------------------|--------|---|
| ISGS #3160-45 (Residence) | | | | | |
| 3160-45-1 | None | 10.0 | 3160-45-1 (0-5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| | | | 3160-45-1 (5-6') | | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-45-2 | None | 10.0 | 3160-45-2 (0-5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| | | | 3160-45-2 (5-6') | | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-45-3 | None | 10.0 | 3160-45-3 (0-5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| | | | 3160-45-3 (5-6') | | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-45-4 | None | 10.0 | 3160-45-4 (0-5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| | | | 3160-45-4 (5-6') | | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| ISGS #3160-50 (Vacant Land) | | | | | |
| 3160-50-1 | None | 5.0 | 3160-50-1 (0-2') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-50-2 | None | 5.0 | 3160-50-2 (0-2') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-50-3 | None | 5.0 | 3160-50-3 (0-2') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-51 (UPRR) | | | | | |
| 3160-51-1 | None | 5.0 | 3160-51-1 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-51-2 | None | 5.0 | 3160-51-2 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-51-3 | None | 5.0 | 3160-51-3 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| ISGS #3160-55 (Agriculture Land) | | | | | |
| 3160-55-1 | None | 5.0 | 3160-55-1 (0-3') | Soil | VOCs/SVOCs/Pest./Herb./Total, TCLP, and SPLP Metals |
| 3160-55-2 | None | 5.0 | 3160-55-2 (0-3') | Soil | VOCs/SVOCs/Pest./Herb./Total, TCLP, and SPLP Metals |
| ISGS #3160-56 (Agriculture Land) | | | | | |
| 3160-56-1 | None | 5.0 | 3160-56-1 (0-1.5') | Soil | VOCs/SVOCs/Pest./Herb./Total, TCLP, and SPLP Metals |
| 3160-56-2 | None | 5.0 | 3160-56-2 (0-1.5') | Soil | VOCs/SVOCs/Pest./Herb./Total, TCLP, and SPLP Metals |
| ISGS #3160-62 (UPRR) | | | | | |
| 3160-62-1 | None | 5.0 | 3160-62-1 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-2 | None | 5.0 | 3160-62-2 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-3 | None | 5.0 | 3160-62-3 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-4 | None | 5.0 | 3160-62-4 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-5 | None | 5.0 | 3160-62-5 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-6 | None | 5.0 | 3160-62-6 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-7 | None | 5.0 | 3160-62-7 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-8 | None | 5.0 | 3160-62-8 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-9 | None | 5.0 | 3160-62-9 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |
| 3160-62-10 | None | 5.0 | 3160-62-10 (0-1.5') | Soil | VOCs/SVOCs/Total, TCLP, and SPLP Metals |

See last page for footnotes.

Table 3-1. Summary of Sampling and Analysis Program

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Borings | Offset from Proposed Location | Boring Depth (feet) | Sample(s) | Matrix | Parameters |
|---------------------------|-------------------------------|---------------------|--------------------|--------|--|
| ISGS #3160-64 (Residence) | | | | | |
| 3160-64-1 | None | 5.0 | 3160-64-1 (0-1.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-64-2 | None | 5.0 | 3160-64-2 (0-1.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |
| 3160-64-3 | None | 5.0 | 3160-64-3 (0-1.5') | Soil | VOCs/SVOCs/PCBs/Total, TCLP, and SPLP Metals |

NA = Not Applicable

GW = Groundwater

ISGS = Illinois State Geological Survey

VOCs= Volatile organic compounds.

SVOCs= Semivolatile organic compounds.

TCLP= Toxicity characteristics leaching procedure.

SPLP= Synthetic precipitation leaching procedure.

PCBs= Polychlorinated biphenyls

Pest. = Pesticides

Herb. = Herbicides

Analysis Methods:

VOCs: SW8260B

SVOCs: SW8270C

Total Metals: SW6010B/SW7470A/SW7471A

TCLP/SPLP Metals: SW6010B/SW7041/SW7470A/SW7841

PCBs: SW8082A

Pesticides = SW 8081B

Herbicides = 8151A

pH: SW9054D

percent solids: SW2540G

Table 4-3. Summary of Soil Impacts and Contaminants of Concern

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Boring ID | pH | PID Reading | Contaminants of Concern Above TCLP and SPL Criteria | Contaminants of Concern Above Total Metal, TCLP, and SPL Criteria | Contaminants of Concern Above Select Location Specific MACs ^{bc} | Contaminants of Concern Above All Location Specific MACs ^a | Off-Site Management | |
|---|------|-------------|---|---|---|---|---|------------------------------|
| | | | | | | | Eligible for CCDD or Uncontaminated Soil Fill Operation? ^c | Classification |
| ISGS #3160-5 (UPRR) | | | | | | | | |
| 3160-5-1 (0-1.2') | 8.60 | 0.0 | None | None | None | Arsenic, Iron, Lead | Yes | Uncontaminated ^{bd} |
| 3160-5-2 (0-1.2') | 6.10 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-5-3 (0-1.2') | 8.00 | 0.0 | None | None | None | None | Yes | Unrestrictive |
| ISGS #3160-8 (J.W. Reynolds Memorial) | | | | | | | | |
| 3160-8-1 (0-3') | 8.50 | 0.0 | None | None | None | None | Yes | Unrestrictive |
| 3160-8-2 (0-3') | 8.30 | 0.0 | None | None | None | Manganese | Yes | Uncontaminated ^{bd} |
| ISGS #3160-9 (C.N.C Guns and Ammo) | | | | | | | | |
| 3160-9-1 (0-4') | 4.60 | 0.0 | Manganese | None | None | Iron | No | Uncontaminated |
| 3160-9-2 (0-4') | 5.40 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-9-3 (0-4') | 7.60 | 0.0 | None | None | None | None | Yes | Unrestrictive |
| ISGS #3160-10 (Benton Grade School District #47) | | | | | | | | |
| 3160-10-1 (0-2.5') | 5.4 | 380.0 | Manganese | None | Naphthalene | Benzene, Iron | No | Non-special |
| 3160-10-2 (0-2.5') | 4.8 | 347.0 | None | None | None | Iron | No | Non-special |
| 3160-10-3 (0-2.5') | 8.2 | 25.0 | Manganese | Iron | None | None | No | Non-special |
| ISGS #3160-16 (Residence) | | | | | | | | |
| 3160-16-1 (0-4') | 6.3 | 0.0 | None | None | None | Iron, Manganese | Yes | Unrestrictive |
| 3160-16-2 (0-4') | 5.6 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-16-3 (0-4') | 4.9 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-16-4 (0-4') | 7.9 | 0.0 | None | None | 2-Methylnaphthalene, Naphthalene | Iron | Yes | Uncontaminated ^{bd} |
| 3160-16-5 (0-4') | 6 | 0.0 | None | None | Naphthalene | 2-Methylnaphthalene, Iron | No | Non-special |
| ISGS #3160-21 (UPRR) | | | | | | | | |
| 3160-21-1 (0-2.5') | 8.3 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-21-2 (0-2.5') | 8.2 | 0.0 | None | None | Naphthalene | 2-Methylnaphthalene, Iron, Manganese | Yes | Uncontaminated ^{bd} |
| 3160-21-3 (0-2.5') | 7 | 0.0 | None | None | None | Chromium, Iron | Yes | Unrestrictive |
| 3160-21-4 (0-2.5') | 8 | 0.0 | None | None | None | Iron, Manganese | Yes | Unrestrictive |
| 3160-21-5 (0-2.5') | 7.8 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-21-6 (0-2.5') | 5.5 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-21-7 (0-2.5') | 7.6 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-21-8 (0-2.5') | 6.4 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-21-9 (0-2.5') | 7.9 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-21-10 (0-2.5') | 7.6 | 0.0 | None | None | None | Naphthalene, Iron | Yes | Uncontaminated ^{bd} |

See footnotes last page.

Table 4-3. Summary of Soil Impacts and Contaminants of Concern

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Boring ID | pH | PID Reading | Contaminants of Concern Above TCLP and SPLP Criteria | Contaminants of Concern Above Total Metal, TCLP, and SPLP Criteria | Contaminants of Concern Above Select Location Specific MACs ^{ac} | Contaminants of Concern Above All Location Specific MACs ^a | Off-Site Management | |
|---|-----|-------------|--|--|---|---|---|------------------------------|
| | | | | | | | Eligible for CCDD or Uncontaminated Soil Fill Operation? ^c | Classification |
| ISGS #3160-23 (Vacant Land) | | | | | | | | |
| 3160-23-1 (0-4.5') | 6.2 | 0.0 | None | None | None | None | No | Uncontaminated |
| 3160-23-2 (0-4.5') | 8.1 | 0.0 | None | None | None | 2-Methylnaphthalene, Naphthalene | Yes | Uncontaminated ^{bd} |
| ISGS #3160-25 (Commercial Building and Residence) | | | | | | | | |
| 3160-25-1 (0-4') | 4.8 | 0.0 | Manganese | None | None | Iron | No | Uncontaminated |
| 3160-25-2 (0-4') | 4.8 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| ISGS #3160-26 (Residence) | | | | | | | | |
| 3160-26-1 (0-4') | 5 | 0.0 | None | None | None | Iron, Manganese | No | Uncontaminated |
| 3160-26-2 (0-4') | 4.3 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| ISGS #3160-28 (Residence) | | | | | | | | |
| 3160-28-1 (0-5') | 4.3 | 0.0 | None | None | None | Iron, Manganese | No | Uncontaminated |
| 3160-28-2 (0-5') | 4.9 | 0.0 | None | None | None | Iron, Manganese | No | Uncontaminated |
| 3160-28-3 (0-5') | 3.8 | 0.0 | Manganese | None | None | Naphthalene, Iron, Selenium | No | Non-special |
| ISGS #3160-32 (Route 37 Collection Center) | | | | | | | | |
| 3160-32-1 (0-3.5') | 6.4 | 0.0 | None | None | None | Manganese | Yes | Unrestrictive |
| 3160-32-2 (0-3.5') | 6.6 | 0.0 | None | None | None | Arsenic, Chromium, Iron, Manganese, Selenium | Yes | Unrestrictive |
| 3160-32-3 (0-3.5') | 6.7 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-32-4 (0-3.5') | 6.7 | 0.0 | None | None | None | 2-Methylnaphthalene, Naphthalene, iron | Yes | Uncontaminated ^{bd} |
| 3160-32-5 (0-3.5') | 5.9 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-32-6 (0-3.5') | 4.6 | 0.0 | Manganese | None | None | Iron | No | Uncontaminated |
| 3160-32-7 (0-3.5') | 5.4 | 0.0 | Manganese | None | None | Iron | No | Uncontaminated |
| ISGS #3160-36 (UPRR) | | | | | | | | |
| 3160-36-1 (0-3') | 7 | 0.0 | None | None | None | Manganese | Yes | Unrestrictive |
| 3160-36-2 (0-3') | 5 | 0.0 | None | None | None | Iron, Manganese | No | Uncontaminated |
| 3160-36-3 (0-3') | 4.6 | 0.0 | None | None | None | Manganese | No | Uncontaminated |
| 3160-36-4 (0-3') | 4.6 | 0.0 | None | None | None | Iron, Manganese | No | Non-special |
| 3160-36-5 (0-3') | 4.6 | 0.0 | None | None | None | Iron, Manganese | No | Uncontaminated |
| 3160-36-6 (0-3') | 4.3 | 0.0 | None | None | None | Iron, Manganese | No | Uncontaminated |
| 3160-36-7 (0-3') | 4.8 | 0.0 | Manganese | None | None | Iron | No | Uncontaminated |
| 3160-36-8 (0-3') | 7.9 | 0.0 | None | None | None | Cobalt, Iron, Manganese | Yes | Unrestrictive |
| 3160-36-9 (0-3') | 8.7 | 0.0 | Lead | None | None | Benzo(a)pyrene, 2-Methylnaphthalene, Naphthalene, Iron, Manganese | Yes | Uncontaminated ^{bd} |
| 3160-36-10 (0-3') | 6.6 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-36-11 (0-3') | 5.3 | 0.0 | None | None | None | Iron | No | Uncontaminated |

See footnotes last page.

Table 4-3. Summary of Soil Impacts and Contaminants of Concern

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Boring ID | pH | PID Reading | Contaminants of Concern Above TCLP and SPLP Criteria | Contaminants of Concern Above Total Metal, TCLP, and SPLP Criteria | Contaminants of Concern Above Select Location Specific MACs ^{ac} | Contaminants of Concern Above All Location Specific MACs ^a | Off-Site Management | |
|----------------------------------|-----|-------------|--|--|---|---|---|------------------------------|
| | | | | | | | Eligible for CCDD or Uncontaminated Soil Fill Operation? ^c | Classification |
| ISGS #3160-45 (Residence) | | | | | | | | |
| 3160-45-1 (0-5') | 8 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-45-1 (5-6') | 7.8 | 0.0 | None | None | None | Iron, Manganese | Yes | |
| 3160-45-2 (0-5') | 7.7 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-45-2 (5-6') | 7.5 | 0.0 | None | None | None | Iron | Yes | |
| 3160-45-3 (0-5') | 8.1 | 0.0 | None | None | None | Cobalt, Iron, Manganese | Yes | Unrestrictive |
| 3160-45-3 (5-6') | 7.7 | 0.0 | None | None | None | Iron, Manganese | Yes | |
| 3160-45-4 (0-5') | 6.3 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-45-4 (5-6') | 6.5 | 0.0 | None | None | None | None | Yes | |
| ISGS #3160-50 (Vacant Land) | | | | | | | | |
| 3160-50-1 (0-2') | 6.2 | 0.0 | Manganese | None | None | None | No | Uncontaminated |
| 3160-50-2 (0-2') | 7.8 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| 3160-50-3 (0-2') | 8 | 0.0 | None | None | None | Chromium, Iron | Yes | Unrestrictive |
| ISGS #3160-51 (UPRR) | | | | | | | | |
| 3160-51-1 (0-1.5') | 7.8 | 0.0 | Lead | None | None | Naphthalene, Iron | Yes | Uncontaminated ^{bd} |
| 3160-51-2 (0-1.5') | 8.9 | 0.0 | None | None | None | Benzo(a)pyrene, Naphthalene, Iron | Yes | Uncontaminated ^{bd} |
| 3160-51-3 (0-1.5') | 8.5 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| ISGS #3160-55 (Agriculture Land) | | | | | | | | |
| 3160-55-1 (0-3') | 5.2 | 0.0 | None | None | None | Iron | No | Uncontaminated |
| 3160-55-2 (0-3') | 8 | 0.0 | None | None | None | Iron | Yes | Unrestrictive |
| ISGS #3160-56 (Agriculture Land) | | | | | | | | |
| 3160-56-1 (0-1.5') | 7.3 | 0.0 | None | None | None | Lead, Manganese | Yes | Unrestrictive |
| 3160-56-2 (0-1.5') | 8.3 | 0.0 | None | None | None | Naphthalene, Chromium, Iron, Lead, Manganese | Yes | Uncontaminated ^{bd} |
| ISGS #3160-62 (UPRR) | | | | | | | | |
| 3160-62-1 (0-1.5') | 8.6 | 0.0 | None | None | None | Naphthalene, Manganese | Yes | Uncontaminated ^{bd} |
| 3160-62-2 (0-1.5') | 6.7 | 0.0 | None | None | None | Lead, Manganese | Yes | Unrestrictive |
| 3160-62-3 (0-1.5') | 5.5 | 0.0 | None | None | None | None | No | Uncontaminated |
| 3160-62-4 (0-1.5') | 7.6 | 0.0 | None | None | None | None | Yes | Unrestrictive |
| 3160-62-5 (0-1.5') | 6.9 | 0.0 | None | None | None | Manganese | Yes | Unrestrictive |
| 3160-62-6 (0-1.5') | 6 | 0.0 | None | None | None | Manganese | No | Uncontaminated |
| 3160-62-7 (0-1.5') | 5.7 | 0.0 | None | None | None | None | No | Uncontaminated |
| 3160-62-8 (0-1.5') | 5.2 | 0.0 | None | None | None | Iron, Manganese, Selenium | No | Uncontaminated |
| 3160-62-9 (0-1.5') | 6 | 0.0 | None | None | None | None | No | Uncontaminated |
| 3160-62-10 (0-1.5') | 5.5 | 0.0 | None | None | None | Manganese | No | Uncontaminated |

See footnotes last page.

Table 4-3. Summary of Soil Impacts and Contaminants of Concern

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Boring ID | pH | PID Reading | Contaminants of Concern Above TCLP and SPLP Criteria | Contaminants of Concern Above Total Metal, TCLP, and SPLP Criteria | Contaminants of Concern Above Select Location Specific MACs ^{ac} | Contaminants of Concern Above All Location Specific MACs ^a | Off-Site Management | |
|---------------------------|-----|-------------|--|--|---|--|---|-------------------------------|
| | | | | | | | Eligible for CCDD or Uncontaminated Soil Fill Operation? ^c | Classification |
| ISGS #3160-64 (Residence) | | | | | | | | |
| 3160-64-1 (0-1.5') | 8.1 | 0.0 | None | None | None | Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene, Naphthalene, Lead | Yes | Uncontaminated ^{abd} |
| 3160-64-2 (0-1.5') | 7.1 | 0.0 | None | None | None | None | Yes | Unrestrictive |
| 3160-64-3 (0-1.5') | 8.2 | 0.0 | None | None | None | Lead, Manganese | Yes | Unrestrictive |

ISGS = Illinois State Geological Society

MAC = Maximum Allowable Concentration

TCLP = Toxicity Characteristic Leaching Procedure

SPLP = Synthetic Precipitation Leaching Procedure

PID = Photo-ionization Detector

"Unrestrictive soil"- may be managed onsite as fill or off-site at a Clean Construction and Demolition Debris (CCDD) or Uncontaminated Soil Fill Operation (USFO) facility

"Uncontaminated soil"- impacted soil suitable for off-site management to an uncontaminated soil fill operation, CCDD or USFO

^a Site contaminants of concern are above location specific MACs. TCLP and SPLP metals results are compared to the TACO Tier 1 remediation objectives for the soil component of the groundwater ingestion exposure route. Metals (excluding arsenic) are considered eligible for off-site management to a CCDD or USFO facility unless the detected total, TCLP, and SPLP concentrations exceed applicable comparison criteria.

^b Soils that contain constituent concentrations below the most stringent MACs may be managed off site as "uncontaminated soil" pursuant to 35 IAC 1100. Uncontaminated soil with a pH ranged of 6.25 to 9.0 and no PID readings above background levels may be managed off site to a CCDD or USFO. When a constituent exceeds a MAC based on a non-MSA, soils that contain constituents below the applicable MACs for a non-MSA, exhibit a pH within the range of 6.25 to 9.0, and do not exhibit PID readings above background levels may be managed off site as "uncontaminated soil" to a CCDD or USFO within the non-MSA county.

^c Metals are considered eligible for off-site management to a CCDD or USFO facility if the detected total concentrations are below background or pH-specific objectives (MAC table), or if the detected TCLP or SPLP concentrations are below TACO Tier 1 Class I soil component of groundwater ingestion objectives.

^d CCDD disposal may not meet acceptance requirements based on detectable impacts.

^e Off-site management to a CCDD or USFO facility restricted to facilities located in a populated area or within Chicago Corporate Limits.

^f Off-site management to a CCDD or USFO facility restricted to facilities located in a populated area (excluding Chicago)

Table 4-4 Estimated Volumes of Impacted Soil
FAS 2882/IL 37
Benton, Franklin County, IL

| Boring ID | Impacted Stationing Along | Contaminants of Concern | | Construction Feature Involving Excavation of Impacted Soil | Excavation Dimension Assumption ^b | Estimated Volume and Classification of Impacted Soil (cubic yards) ^a Standard Specifications, Article 669.09 | | | | | |
|--|---|--|---|--|--|--|------------|--------|------------|------------|------------|
| | | Above All Applicable Comparison Criteria | Above Most Stringent MAC, Chicago MAC or SCGIER Criteria Only | | | (a)(1) | (a)(2) | (a)(3) | (a)(4) | (a)(5) | (b)(1) |
| ISGS #3160-5 (UPRR) | | | | | | | | | | | |
| 3160-5-2 (0-1.2') | Station 12+00, 0' to 50' LT to Station 14+00, 0' to 50' LT | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 314 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | -- | 314 |
| ISGS #3160-9 (C.N.C Guns and Ammo) | | | | | | | | | | | |
| 3160-9-1 (0-4') | Station 0+0, 0' to 50' RT to Station 1+25, 0' to 47' RT | Manganese, pH | Iron | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 215 |
| 3160-9-2 (0-4') | | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 215 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | -- | 430 |
| ISGS #3160-10 (Benton Grade School District #47) | | | | | | | | | | | |
| 3160-10-1 (0-2.5') | Station 1+75, 0' to 50' RT to Station 3+90, 0' to 55' LT | Manganese, pH | Benzene, Naphthalene, Iron | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | 266.67 | -- |
| 3160-10-2 (0-2.5') | | pH | Iron | Cut and Fill | | -- | -- | -- | -- | 266.67 | -- |
| 3160-10-3 (0-2.5') | | Manganese | Iron | Cut and Fill | | -- | -- | -- | -- | 266.67 | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | 800 | -- |
| ISGS #3160-16 (Residence) | | | | | | | | | | | |
| 3160-16-2 (0-4') | Station 10+40, 0' to 35' RT to Station 11+70, 0' to 190' RT | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 493 |
| 3160-16-3 (0-4') | | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 493 |
| 3160-16-4 (0-4') | Station 12+15, 0 to 65' RT to Station 14+00, 0 to 45' RT | None | 2-Methylnaphthalene, Naphthalene, Iron | Cut and Fill | | -- | 493 | -- | -- | -- | -- |
| 3160-16-5 (0-4') | Station 14+00, 0 to 45' RT to Station 15+40, 0 to 55' RT | pH | 2-Methylnaphthalene, Naphthalene, Iron | Cut and Fill | | 493 | -- | -- | -- | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | 493 | 493 | -- | -- | -- | 986 |
| ISGS #3160-21 (UPRR) | | | | | | | | | | | |
| 3160-21-2 (0-2.5') | Station 30+00, 0' to 50' LT to Station 31+25, 0' to 50' LT | None | 2-Methylnaphthalene, Naphthalene, Iron | Cut and Fill | | -- | 259 | -- | -- | -- | -- |
| 3160-21-6 (0-2.5') | Station 37+25, 0 to 50' LT to Station 39+25, 0 to 50' LT | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 259 |
| 3160-21-10 (0-2.5') | Station 45+45, 0' to 65' LT to Station 46+55, 0' to 40' LT | None | Naphthalene, Iron | Cut and Fill | | -- | -- | -- | 259 | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | 259 | -- | 259 | -- | 259 |

See footnotes last page.

Table 4-4 Estimated Volumes of Impacted Soil
FAS 2882/IL 37
Benton, Franklin County, IL

| Boring ID | Impacted Stationing Along | Contaminants of Concern | | Construction Feature Involving Excavation of Impacted Soil | Excavation Dimension Assumption ^b | Estimated Volume and Classification of Impacted Soil (cubic yards) ^a Standard Specifications, Article 669.09 | | | | | |
|--|--|--|--|--|--|--|--------------|--------|--------|--------|---------------|
| | | Above All Applicable Comparison Criteria | Above Most Stringent MAC, Chicago MAC or SCGIER Criteria Only | | | (a)(1) | (a)(2) | (a)(3) | (a)(4) | (a)(5) | (b)(1) |
| ISGS #3160-23 (Vacant Land) | | | | | | | | | | | |
| 3160-23-1 (0-4.5') | Station 22+00, 0' to 65' RT to Station 23+00, 0' to 65' RT | pH | None | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 80 |
| 3160-23-2 (0-4.5') | Station 23+00, 0' to 65' RT to Station 24+00, 0' to 65' RT | None | 2-Methylnaphthalene, Naphthalene | Cut and Fill | | -- | 80 | -- | -- | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | 80 | -- | -- | -- | 80 |
| ISGS #3160-25 (Commercial Building and Residence) | | | | | | | | | | | |
| 3160-25-1 (0-4') | Station 30+75, 0' to 50' RT to Station 32+75, 0' to 50' RT | Manganese, pH | Iron, Manganese | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 236.5 |
| 3160-25-2 (0-4') | | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 236.5 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | -- | 473 |
| ISGS #3160-26 (Residence) | | | | | | | | | | | |
| 3160-26-1 (0-4') | Station 32+75, 0' to 50' RT to Station 34+75, 0' to 60' LT | pH | Iron, Manganese | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 69 |
| 3160-26-2 (0-4') | | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 69 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | -- | 138 |
| ISGS #3160-28 (Residence) | | | | | | | | | | | |
| 3160-28-1 (0-5') | Station 35+75, 0' to 45' RT to Station 37+75, 0' to 55' RT | pH | Iron, Manganese | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 159.7 |
| 3160-28-2 (0-5') | | pH | Iron, Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 159.7 |
| 3160-28-3 (0-5') | Station 37+75, 0' to 55' RT to Station 38+75, 0' to 55' RT | Manganese, pH | Naphthalene, Iron, Selenium | Cut and Fill | | 159.7 | -- | -- | -- | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | 159.7 | -- | -- | -- | -- | 319.33 |
| ISGS #3160-32 (Route 37 Collection Center) | | | | | | | | | | | |
| 3160-32-4 (0-3.5') | Station 45+50, 0' to 65' RT to Station 46+50, 0' to 65' RT | None | 2-Methylnaphthalene, Naphthalene, iron | Cut and Fill | | -- | 128.6 | -- | -- | -- | -- |
| 3160-32-5 (0-3.5') | Station 46+50, 0' to 65' RT to Station 49+50, 0' to 65' RT | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 128.6 |
| 3160-32-6 (0-3.5') | | pH | Iron, Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 128.6 |
| 3160-32-7 (0-3.5') | | Manganese, pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 128.6 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | 128.6 | -- | -- | -- | 385.71 |
| ISGS #3160-36 (UPRR) | | | | | | | | | | | |
| 3160-36-2 (0-3') | Station 50+50, 0' to 45' LT to Station 55+50, 0' to 40' LT | pH | Iron, Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 290.5 |
| 3160-36-3 (0-3') | | pH | Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 290.5 |
| 3160-36-4 (0-3') | Station 55+50, 0' to 40' LT to Station 57+25, 0' to 45' LT | pH | Iron, Manganese | Cut and Fill | | 290.5 | -- | -- | -- | -- | -- |
| 3160-36-5 (0-3') | Station 57+25, 0' to 45' LT to Station 63+00, 0' to 50' LT | pH | Iron, Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 290.5 |
| 3160-36-6 (0-3') | | pH | Iron, Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 290.5 |
| 3160-36-7 (0-3') | | Manganese | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 290.5 |
| 3160-36-9 (0-3') | Station 71+75, 0' to 40' LT to Station 72+75, 0' to 40' LT | Lead | Benzof(a)pyrene, 2-Methylnaphthalene, Naphthalene, Iron, Manganese | Cut and Fill | | -- | 290.5 | -- | -- | -- | -- |
| 3160-36-11 (0-3') | Station 75+75, 0' to 40' LT to Station 77+00, 0' to 40' LT | pH | Iron | Cut and Fill | | -- | -- | -- | -- | -- | 290.5 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | 290.5 | 290.5 | -- | -- | -- | 1743.3 |

See footnotes last page.

**Table 4-4 Estimated Volumes of Impacted Soil
FAS 2882/IL 37
Benton, Franklin County, IL**

| Boring ID | Impacted Stationing Along | Contaminants of Concern | | Construction Feature Involving Excavation of Impacted Soil | Excavation Dimension Assumption ^b | Estimated Volume and Classification of Impacted Soil (cubic yards) ^a Standard Specifications, Article 669.09 | | | | | |
|--|--|--|--|--|--|--|--------|--------|--------|--------|--------|
| | | Above All Applicable Comparison Criteria | Above Most Stringent MAC, Chicago MAC or SCGIER Criteria Only | | | (a)(1) | (a)(2) | (a)(3) | (a)(4) | (a)(5) | (b)(1) |
| ISGS #3160-50 (Vacant Land) | | | | | | | | | | | |
| 3160-50-1 (0-2') | Station 75+50, 0' to 60' RT to Station 76+, 0' to 75' RT | Manganese, pH | None | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 18 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | -- | 18 |
| ISGS #3160-51 (UPRR) | | | | | | | | | | | |
| 3160-51-1 (0-1.5') | Station 81+00, 0' to 55' LT to Station 84+25, 0' to 35' LT | Lead | Naphthalene, Iron | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | 455.67 | -- | -- |
| 3160-51-2 (0-1.5') | | None | Benzo(a)pyrene, Naphthalene, Iron | Cut and Fill | | -- | -- | -- | 455.67 | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | 911.33 | -- | -- |
| ISGS #3160-55 (Agriculture Land) | | | | | | | | | | | |
| 3160-55-1 (0-3') | Station 87+00, 0' to 55' RT to Station 88+00, 0' to 55' RT | pH | Iron | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | -- | -- | 197 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | -- | -- | 197 |
| ISGS #3160-56 (Agriculture Land) | | | | | | | | | | | |
| 3160-56-2 (0-1.5') | Station 90+00, 0' to 55' RT to Station 91+00, 0' to 45' RT | None | Naphthalene, Chromium, Iron, Lead, Manganese | Cut and Fill | | -- | -- | -- | 92 | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | 92 | -- | -- |
| ISGS #3160-62 (UPRR) | | | | | | | | | | | |
| 3160-62-1 (0-1.5') | Station 104+0, 0' to 35' LT to Station 105+50, 0' to 35' LT | None | Naphthalene, Manganese | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | -- | -- | 144.3 | -- | -- |
| 3160-62-3 (0-1.5') | Station 112+0, 0' to 40' LT to Station 113+50, 0' to 40' LT | pH | None | Cut and Fill | | -- | -- | -- | -- | -- | 144.3 |
| 3160-62-6 (0-1.5') | Station 117+50, 0' to 40' LT to Station 128+00, 0' to 40' LT | pH | Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 144.3 |
| 3160-62-7 (0-1.5') | | pH | None | Cut and Fill | | -- | -- | -- | -- | -- | 144.3 |
| 3160-62-8 (0-1.5') | | pH | Iron, Manganese, Selenium | Cut and Fill | | -- | -- | -- | -- | -- | 144.3 |
| 3160-62-9 (0-1.5') | | pH | None | Cut and Fill | | -- | -- | -- | -- | -- | 144.3 |
| 3160-62-10 (0-1.5') | | pH | Manganese | Cut and Fill | | -- | -- | -- | -- | -- | 144.3 |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | -- | -- | 144.3 | -- | 865.8 |
| ISGS #3160-64 (Residence) | | | | | | | | | | | |
| 3160-64-1 (0-1.5') | Station 115+50, 0' to 50' RT to Station 116+55, 0' to 50' RT | None | Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene, Naphthalene, Lead | Cut and Fill | Excavation volume estimated from cross sections provided by IDOT | -- | 62.33 | -- | -- | -- | -- |
| Total Volume of Impacted Soil in Construction Zone: | | | | | | -- | 62.33 | -- | -- | -- | -- |

CCDD - Clean Construction Demolition Debris
 GW = Groundwater
 ISGS = Illinois State Geological Survey

"Unrestrictive soil"- may be managed onsite as fill or off-site at a CCDD or USFO facility
 "Uncontaminated soil"- impacted soil suitable for off-site management to an uncontaminated soil fill operation, CCDD or USFO
 "**"- Exceeds only construction worker exposure limits

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

Table 5-1. Remediation Cost Associated with IDOT's Construction Project

| Site | Pay Item/Cost per Unit | | | | | | | | | | | | | | Total Cost (Rounded to nearest dollar) |
|---|--|---------------------|---|---------------------|---------------------------|---------------------|--|----------------------|---|----------------------|------------------------|---------------------|----------------------|--------------|--|
| | Special Waste Plans and Reports ^a | | Non-Special Waste Disposal \$71.00 per cubic yard | | | | CCDD/Non-Special Waste Disposal \$71.00 per cubic yard | | Non-Special Waste Disposal \$71.00 per cubic yard | | Soil Disposal Analysis | | | | |
| | | | 669.09(a)(1) ^b | | 669.09(a)(5) ^b | | 669.09(a)(2)/(3)/(4) ^c | | 669.09(b)(1) ^d | | | | | | |
| Quantity | Cost | Quantity | Cost | Quantity | Cost | Quantity | Cost | Quantity | Cost | Quantity | Cost | Quantity | Cost | | |
| ISGS #3160-5 (UPRR) | 1 | \$ 1,052.63 | | \$ - | | \$ - | | \$ - | | 314 | \$ 22,294.00 | 1 | \$ 1,000 | \$ 24,346.63 | |
| ISGS #3160-9 (C.N.C Guns and Ammo) | 1 | \$ 1,052.63 | | \$ - | | \$ - | | \$ - | | 430 | \$ 30,530.00 | 1 | \$ 1,000 | \$ 32,582.63 | |
| ISGS #3160-10 (Benton Grade School District #47) | 1 | \$ 1,052.63 | | \$ - | 800 | \$ 56,800.00 | | \$ - | | | \$ - | 1 | \$ 1,000 | \$ 58,852.63 | |
| ISGS #3160-16 (Residence) | 1 | \$ 1,052.63 | 493 | \$ 35,003.00 | | \$ - | 493 | \$ 35,003.00 | 986 | \$ 70,006.00 | 1 | \$ 1,000 | \$ 142,064.63 | | |
| ISGS #3160-21 (UPRR) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 518 | \$ 36,778.00 | 259 | \$ 18,389.00 | 1 | \$ 1,000 | \$ 57,219.63 | | |
| ISGS #3160-23 (Vacant Land) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 80 | \$ 5,680.00 | 80 | \$ 5,680.00 | 1 | \$ 1,000 | \$ 13,412.63 | | |
| ISGS #3160-25 (Commercial Building and Residence) | 1 | \$ 1,052.63 | | \$ - | | \$ - | | \$ - | 473 | \$ 33,583.00 | 1 | \$ 1,000 | \$ 35,635.63 | | |
| ISGS #3160-26 (Residence) | 1 | \$ 1,052.63 | | \$ - | | \$ - | | \$ - | 138 | \$ 9,798.00 | 1 | \$ 1,000 | \$ 11,850.63 | | |
| ISGS #3160-28 (Residence) | 1 | \$ 1,052.63 | 159.7 | \$ 11,338.70 | | \$ - | | \$ - | 319.33 | \$ 22,672.43 | 1 | \$ 1,000 | \$ 36,063.76 | | |
| ISGS #3160-32 (Route 37 Collection Center) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 128.6 | \$ 9,130.60 | 385.71 | \$ 27,385.41 | 1 | \$ 1,000 | \$ 38,568.64 | | |
| ISGS #3160-36 (UPRR) | 1 | \$ 1,052.63 | 290.5 | \$ 20,625.50 | | \$ - | 290.5 | \$ 20,625.50 | 1743.3 | \$ 123,774.30 | 1 | \$ 1,000 | \$ 167,077.93 | | |
| ISGS #3160-50 (Vacant Land) | 1 | \$ 1,052.63 | | \$ - | | \$ - | | \$ - | 18 | \$ 1,278.00 | 1 | \$ 1,000 | \$ 3,330.63 | | |
| ISGS #3160-51 (UPRR) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 911.33 | \$ 64,704.43 | | \$ - | 1 | \$ 1,000 | \$ 66,757.06 | | |
| ISGS #3160-55 (Agriculture Land) | 1 | \$ 1,052.63 | | \$ - | | \$ - | | \$ - | 197 | \$ 13,987.00 | 1 | \$ 1,000 | \$ 16,039.63 | | |
| ISGS #3160-56 (Agriculture Land) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 92 | \$ 6,532.00 | | \$ - | 1 | \$ 1,000 | \$ 8,584.63 | | |
| ISGS #3160-62 (UPRR) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 144.3 | \$ 10,245.30 | 865.8 | \$ 61,471.80 | 1 | \$ 1,000 | \$ 73,769.73 | | |
| ISGS #3160-64 (Residence) | 1 | \$ 1,052.63 | | \$ - | | \$ - | 62.33 | \$ 4,425.43 | | \$ - | 1 | \$ 1,000 | \$ 6,478.06 | | |
| Project Totals | 19 | \$ 17,894.74 | 943.2 | \$ 66,967.20 | 800 | \$ 56,800.00 | 2720.06 | \$ 193,124.26 | 6209.14 | \$ 440,848.94 | 19 | \$ 17,000.00 | \$ 792,635.14 | | |

Notes:

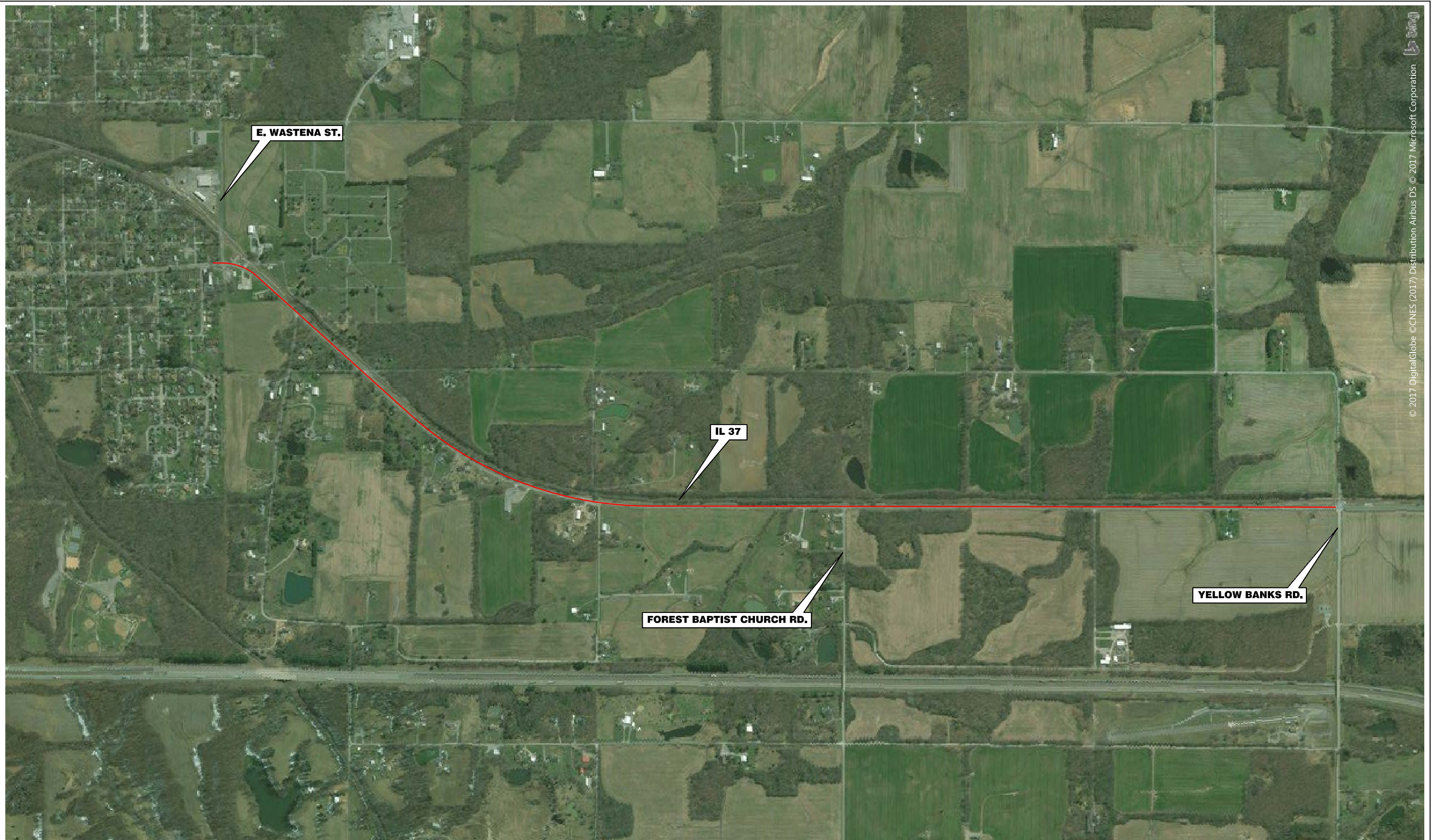
^aSpecial waste plans assume the following documents and costs are required - (Site health and safety plan, site contamination operation plan, erosion control plan, and one final environmental construction report. The total cost for documents described is apportioned equally between the potential waste properties listed above and assumes the activities will occur during one mobilization. This line item also includes labor, expenses and equipment for air monitoring field oversight.

^bMaterial must be managed to a non-special waste disposal facility. Transportation costs are based on generic 100-mile distance facility and a truck capacity of 14 cubic yards.

^cAlthough the disposal costs are estimated as a non-special waste, soil in this category may be managed at a CCDD facility or USFO as uncontaminated soil.

^dAlthough the disposal costs are estimated as a non-special waste, soil in this category may be managed as uncontaminated soil, but not at a CCDD facility or USFO due to pH outside of the acceptable range.

Disposal Analysis Methods: EPA Methods 1311, 8260B, 8270C, 8081, 8151A, 9045C, 1030 and 9095A.



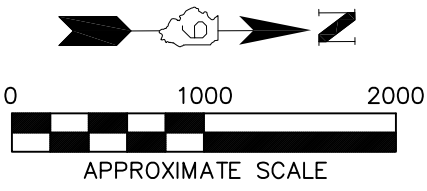
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E. WASTENA ST.

IL 37

FOREST BAPTIST CHURCH RD.

YELLOW BANKS RD.



WORK ORDER 28

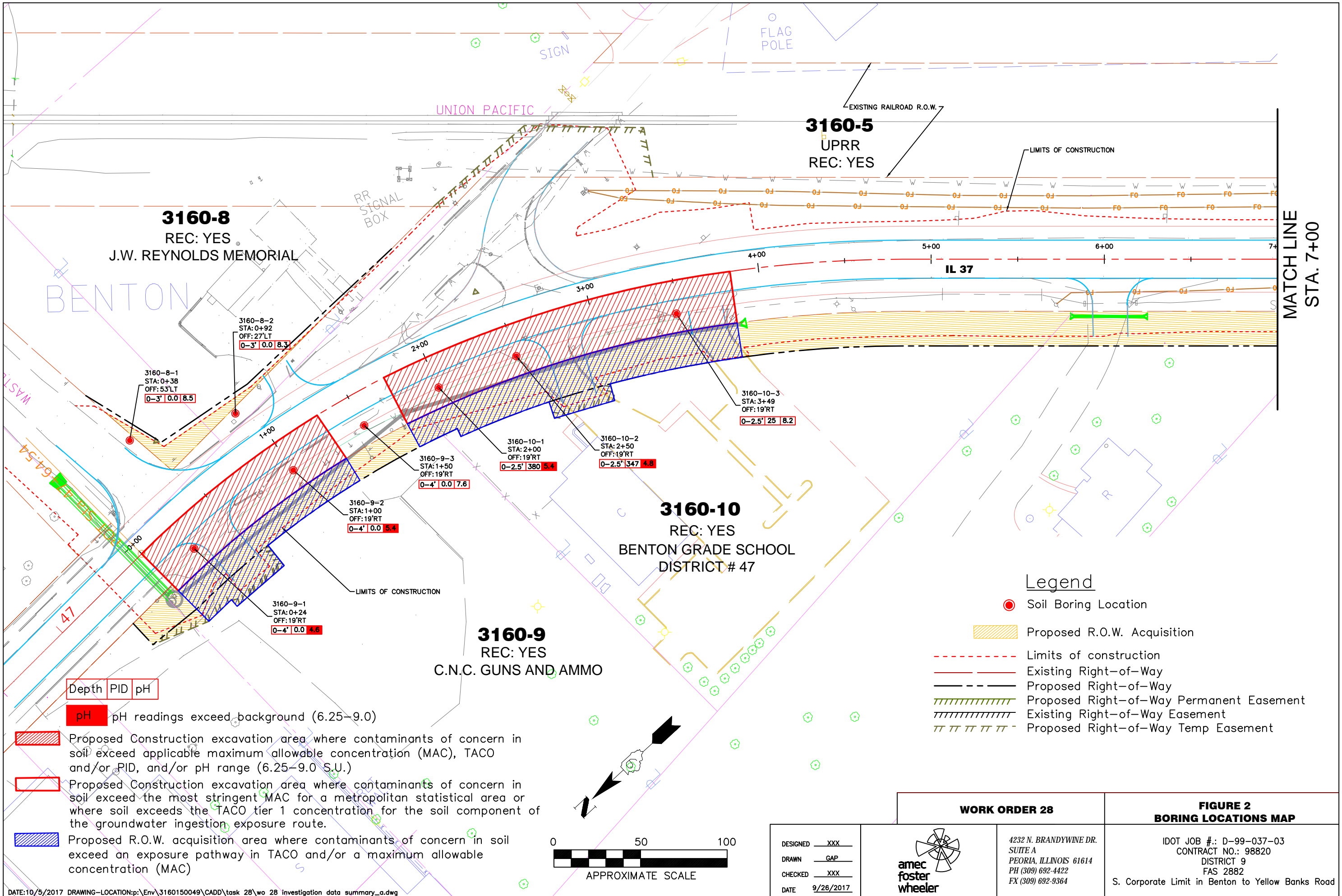
**FIGURE 1
LOCATION MAP**

DESIGNED XXX
 DRAWN GAP
 CHECKED XXX
 DATE 9/27/2017



4232 N. BRANDYWINE DR.
 SUITE A
 PEORIA, ILLINOIS 61614
 PH (309) 692-4422
 FX (309) 692-9364

IDOT JOB #: D-99-037-03
 CONTRACT NO.: 98820
 DISTRICT 9
 FAS 2882
 S. Corporate Limit in Benton to Yellow Banks Road



3160-8
REC: YES
J.W. REYNOLDS MEMORIAL

3160-5
UPRR
REC: YES

3160-10
REC: YES
BENTON GRADE SCHOOL
DISTRICT # 47

3160-9
REC: YES
C.N.C. GUNS AND AMMO

| Depth | PID | pH |
|-------|-----|----|
| | | pH |

pH readings exceed background (6.25-9.0)

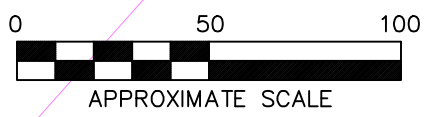
Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement



| | |
|----------|-----------|
| DESIGNED | XXX |
| DRAWN | GAP |
| CHECKED | XXX |
| DATE | 9/26/2017 |



4232 N. BRANDYWINE DR.
SUITE A
PEORIA, ILLINOIS 61614
PH (309) 692-4422
FX (309) 692-9364

**FIGURE 2
BORING LOCATIONS MAP**

IDOT JOB #: D-99-037-03
CONTRACT NO.: 98820
DISTRICT 9
FAS 2882
S. Corporate Limit in Benton to Yellow Banks Road

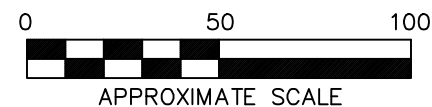
3160-5
UPRR
REC: YES

3160-16
RESIDENCE
REC: YES

MATCH LINE
STA. 7+00

MATCH LINE
STA. 14+00

- Legend**
- Soil Boring Location
 - Proposed R.O.W. Acquisition
 - Limits of construction
 - Existing Right-of-Way
 - Proposed Right-of-Way
 - Proposed Right-of-Way Permanent Easement
 - Existing Right-of-Way Easement
 - Proposed Right-of-Way Temp Easement
- | Depth | PID | pH |
|-------|-----|----|
| | | |
- pH** pH readings exceed background (6.25–9.0)
- Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25–9.0 S.U.)
 - Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
 - Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)



DESIGNED XXX
DRAWN GAP
CHECKED XXX
DATE 9/26/2017

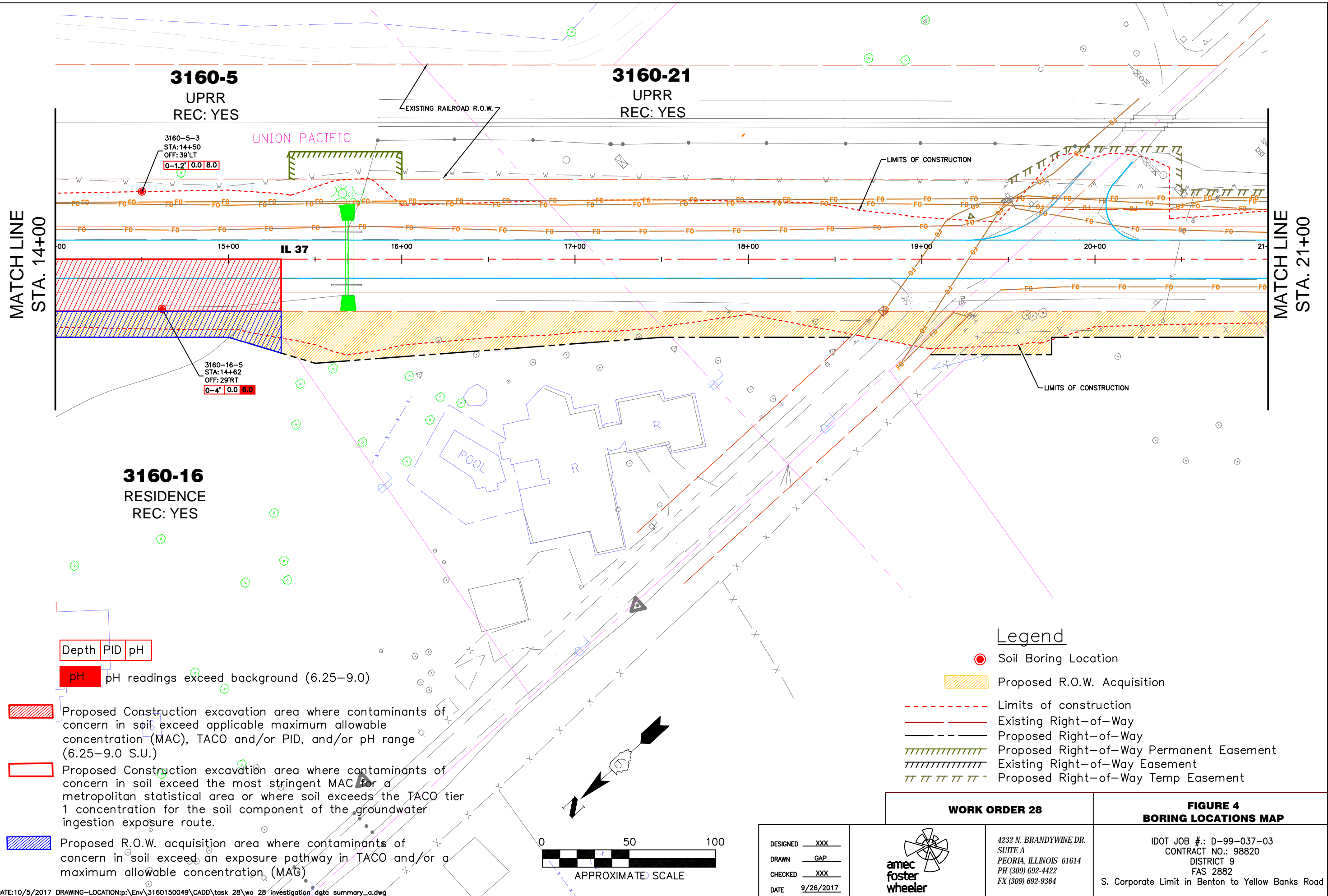


4232 N. BRANDYWINE DR.
SUITE A
PEORIA, ILLINOIS 61614
PH (309) 692-4422
FX (309) 692-9364

WORK ORDER 28

**FIGURE 3
BORING LOCATIONS MAP**

IDOT JOB #: D-99-037-03
CONTRACT NO.: 98820
DISTRICT 9
FAS 2882
S. Corporate Limit in Benton to Yellow Banks Road



| Depth | PID | pH |
|-------|-----|----|
|-------|-----|----|

pH pH readings exceed background (6.25-9.0)

[Red Hatched Box] Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

[White Box] Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

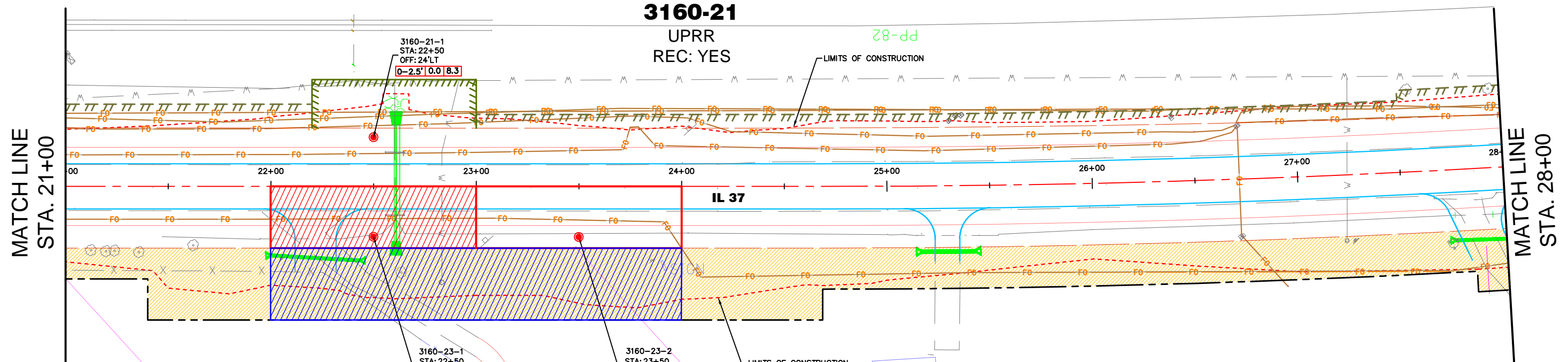
[Blue Hatched Box] Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- - - Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- ▨ Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- ▨ Proposed Right-of-Way Temp Easement

WORK ORDER 28 **FIGURE 4 BORING LOCATIONS MAP**

| | | | | |
|-----------------|--|---|---|--|
| DESIGNED: XXX | | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |
| DRAWN: GAP | | | | |
| CHECKED: XXX | | | | |
| DATE: 9/26/2017 | | | | |



3160-21
UPRR
REC: YES

3160-23
VACANT LAND
REC: YES

3160-21-1
STA: 22+50
OFF: 24'LT
0-2.5' | 0.0 | 8.3

3160-23-1
STA: 22+50
OFF: 25'RT
0-4.5' | 0.0 | 6.2

3160-23-2
STA: 23+50
OFF: 25'RT
0-4.5' | 0.0 | 8.1

| Depth | PID | pH |
|-------|-----|----|
|-------|-----|----|

pH pH readings exceed background (6.25-9.0)

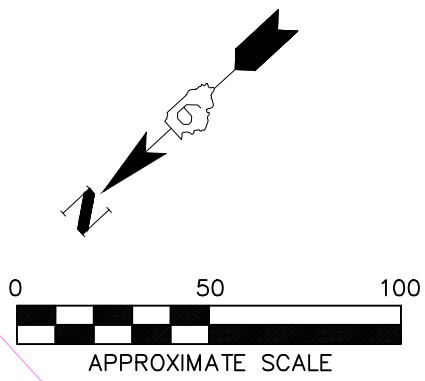
[Red Hatched Box] Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)


[Red Outline Box] Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

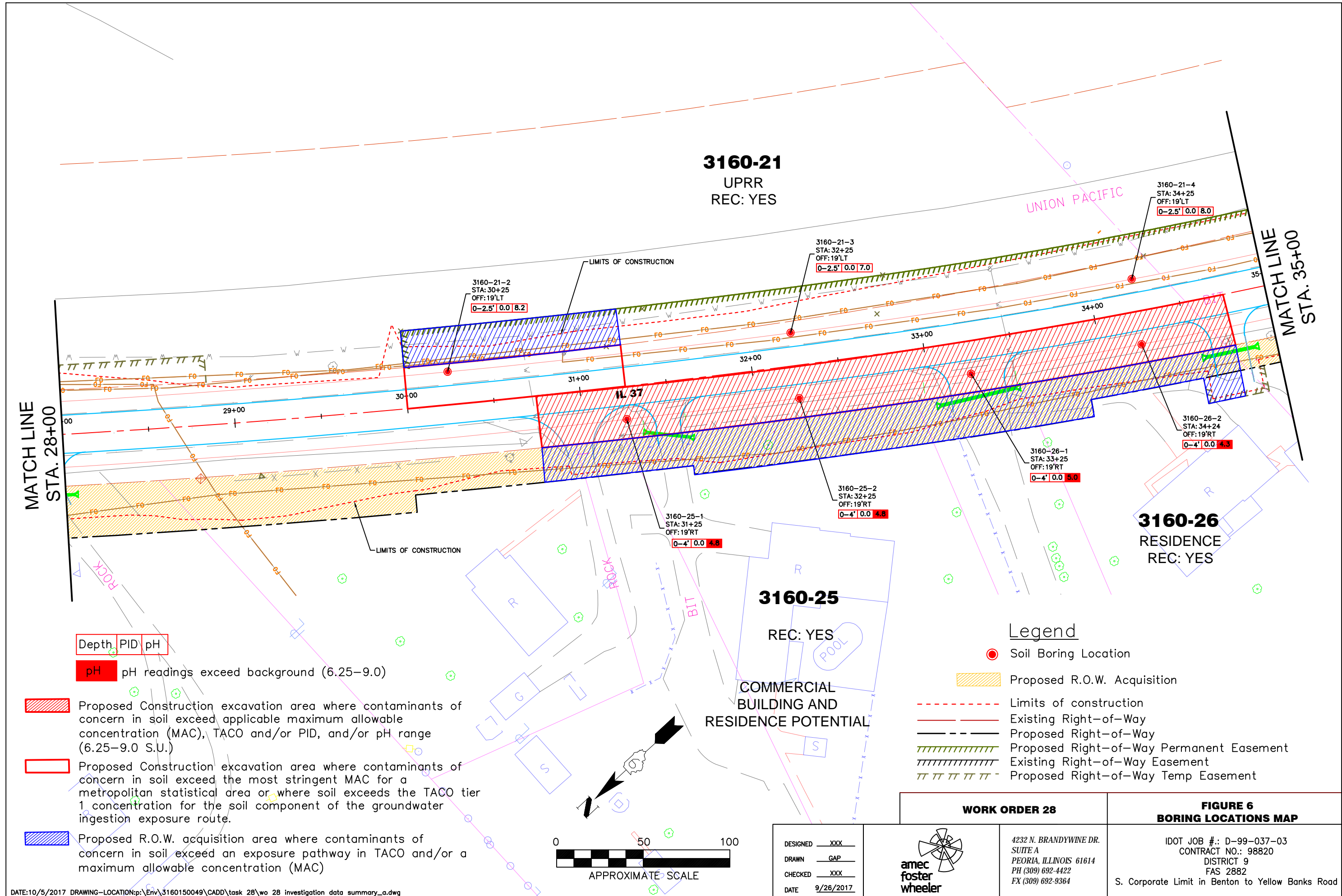
[Blue Hatched Box] Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- - - - - Limits of construction
- — — — Existing Right-of-Way
- — — — Proposed Right-of-Way
- ||||| Proposed Right-of-Way Permanent Easement
- ||||| Existing Right-of-Way Easement
- ||||| Proposed Right-of-Way Temp Easement



| | | | |
|----------------------|-----------|---|---|
| WORK ORDER 28 | | FIGURE 5 BORING LOCATIONS MAP | |
| DESIGNED | XXX |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| DRAWN | GAP | | |
| CHECKED | XXX | | |
| DATE | 9/26/2017 | | |
| | | | |



3160-21
UPRR
REC: YES

3160-26
RESIDENCE
REC: YES

3160-25
REC: YES
COMMERCIAL
BUILDING AND
RESIDENCE POTENTIAL

| Depth | PID | pH |
|-------|-----|----|
| | | pH |

pH pH readings exceed background (6.25-9.0)

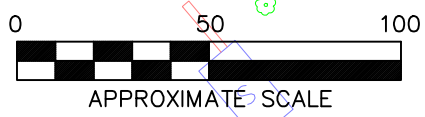
[Red Hatched] Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

[Orange Hatched] Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

[Blue Hatched] Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement



DESIGNED: XXX
DRAWN: GAP
CHECKED: XXX
DATE: 9/26/2017



4232 N. BRANDYWINE DR.
SUITE A
PEORIA, ILLINOIS 61614
PH (309) 692-4422
FX (309) 692-9364




WORK ORDER 28

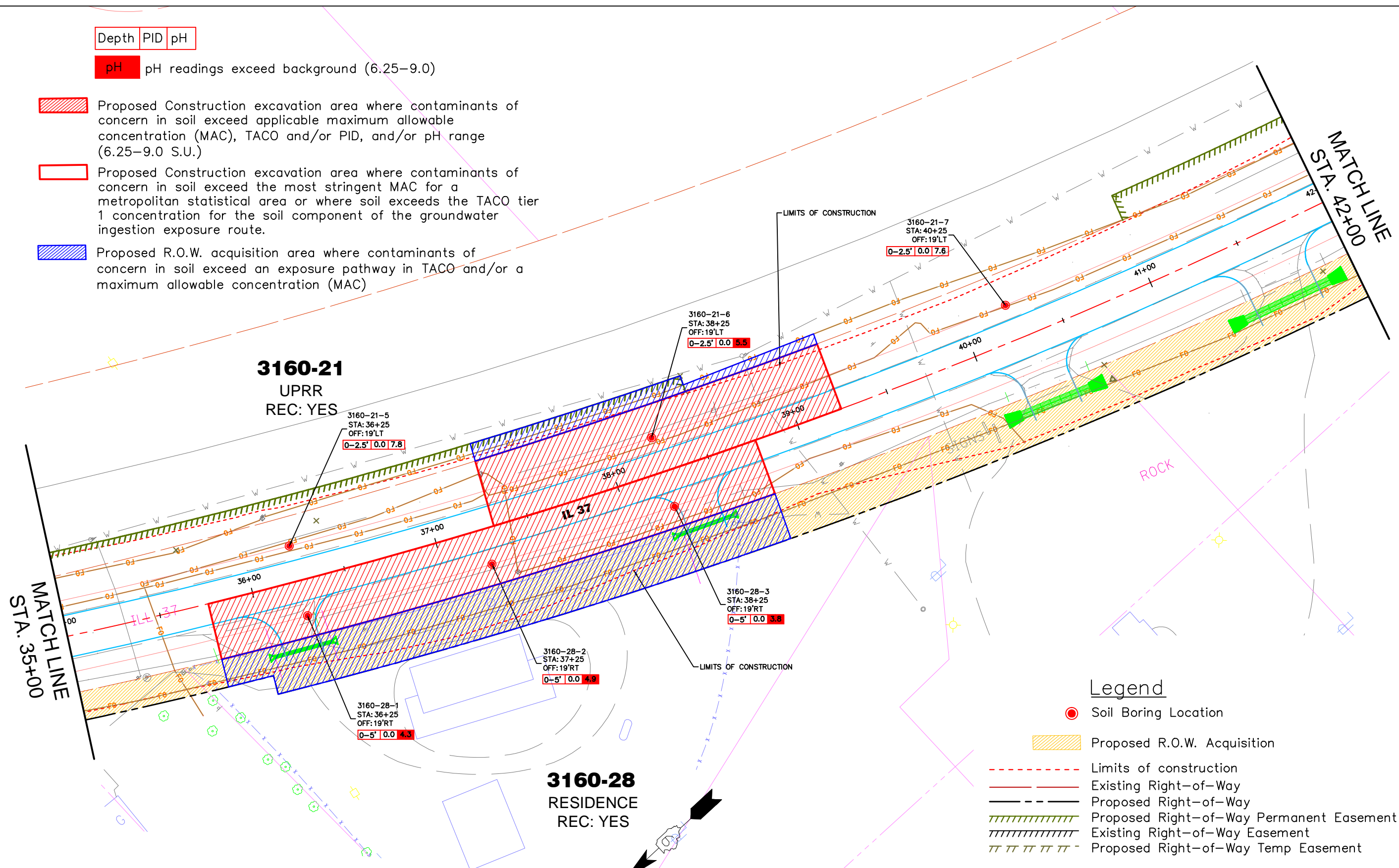
**FIGURE 6
BORING LOCATIONS MAP**

IDOT JOB #: D-99-037-03
CONTRACT NO.: 98820
DISTRICT 9
FAS 2882
S. Corporate Limit in Benton to Yellow Banks Road





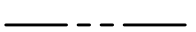

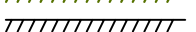

| | | |
|-------|-----|----|
| Depth | PID | pH |
|-------|-----|----|

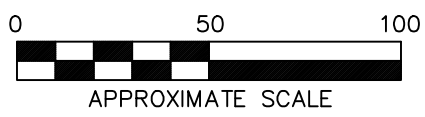
pH pH readings exceed background (6.25–9.0)


-  Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25–9.0 S.U.)
-  Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
-  Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

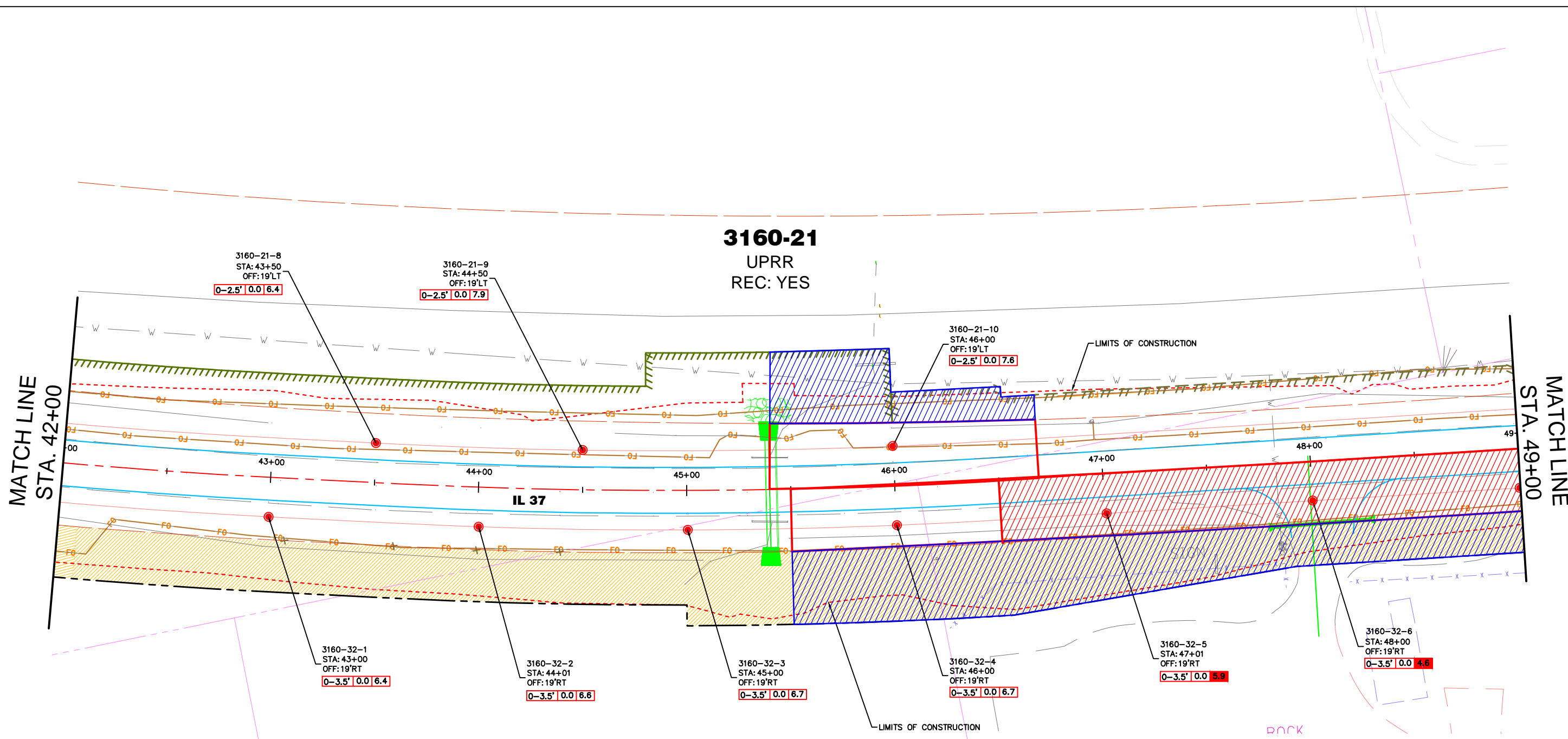


Legend

-  Soil Boring Location
-  Proposed R.O.W. Acquisition
-  Limits of construction
-  Existing Right-of-Way
-  Proposed Right-of-Way
-  Proposed Right-of-Way Permanent Easement
-  Existing Right-of-Way Easement
-  Proposed Right-of-Way Temp Easement

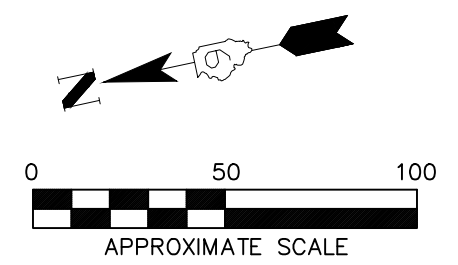


| | | | |
|----------------------|-----------|---|---|
| WORK ORDER 28 | | FIGURE 7 BORING LOCATIONS MAP | |
| DESIGNED | XXX |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| DRAWN | GAP | | |
| CHECKED | XXX | | |
| DATE | 9/26/2017 | | |
| | | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |



- | Depth | PID | pH |
|---|-----|----|
| pH readings exceed background (6.25-9.0) | | |
| Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.) | | |
| Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route. | | |
| Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC) | | |

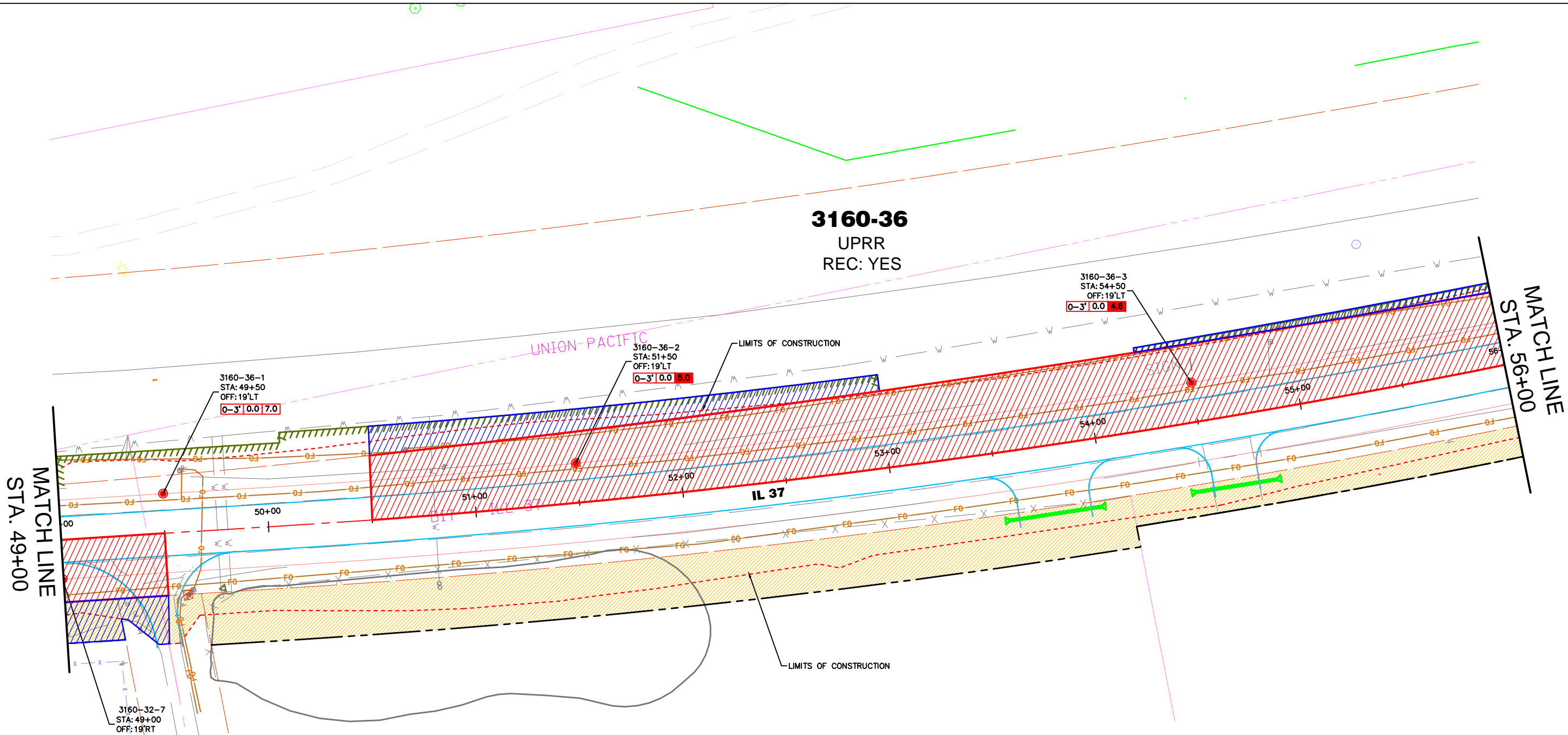
3160-32
ROUTE 37 COLLECTION CENTER
REC: YES



- Legend**
- Soil Boring Location
 - Proposed R.O.W. Acquisition
 - Limits of construction
 - Existing Right-of-Way
 - Proposed Right-of-Way
 - Proposed Right-of-Way Permanent Easement
 - Existing Right-of-Way Easement
 - Proposed Right-of-Way Temp Easement

| | | | |
|----------------------|--|---|--|
| WORK ORDER 28 | | FIGURE 8 BORING LOCATIONS MAP | |
| DESIGNED: XXX | | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | |
| DRAWN: GAP | | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |
| CHECKED: XXX | | | |
| DATE: 9/26/2017 | | | |

3160-36
UPRR
REC: YES



MATCH LINE
STA. 49+00

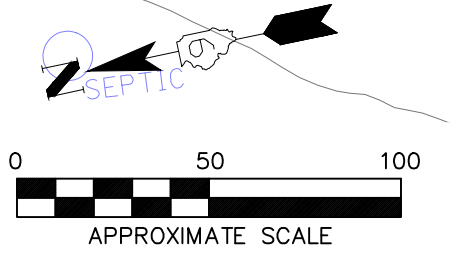
MATCH LINE
STA. 56+00

| Depth | PID | pH |
|--|-----|----|
| pH readings exceed background (6.25-9.0) | | |

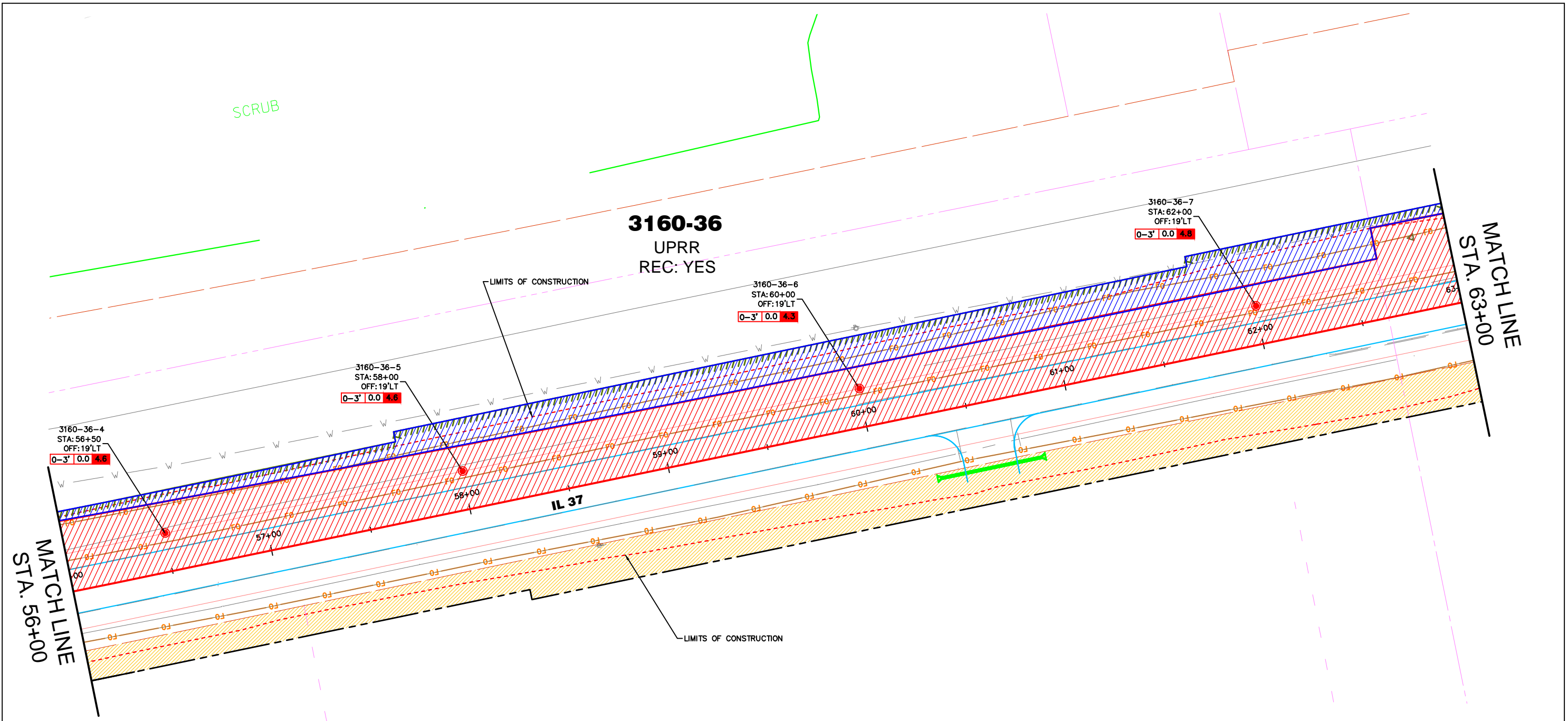
- Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)
- Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
- Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement



| | | | |
|----------------------|-----------|--|---|
| WORK ORDER 28 | | FIGURE 9 BORING LOCATIONS MAP | |
| DESIGNED | XXX | | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| DRAWN | GAP | | |
| CHECKED | XXX | | |
| DATE | 9/26/2017 | | |
| | | | |



SCRUB

3160-36
UPRR
REC: YES

MATCH LINE
STA. 56+00

MATCH LINE
STA. 63+00

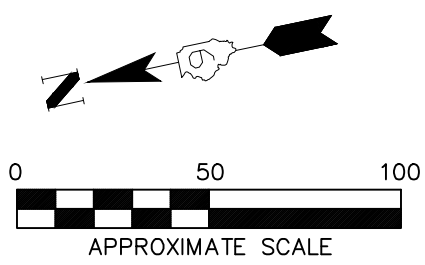
| Depth | PID | pH |
|-------|-----|-----|
| 0-3' | 0.0 | 4.6 |

pH pH readings exceed background (6.25-9.0)

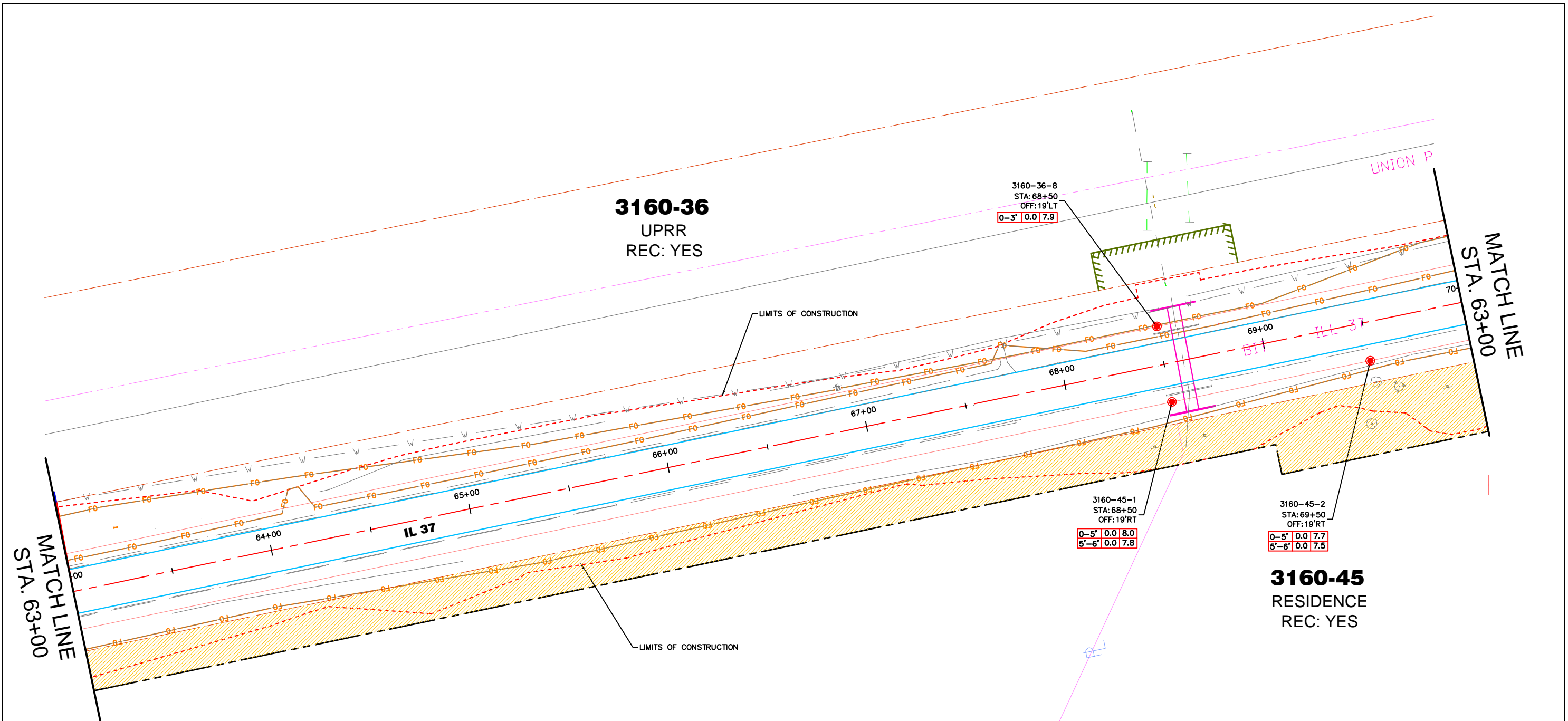
- Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)
- Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
- Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement



| WORK ORDER 28 | | FIGURE 10 BORING LOCATIONS MAP | |
|---------------|-----------|---|---|
| DESIGNED | XXX | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN | GAP | | |
| CHECKED | XXX | | |
| DATE | 9/26/2017 | | |



| | | |
|-------|-----|----|
| Depth | PID | pH |
|-------|-----|----|

pH pH readings exceed background (6.25-9.0)

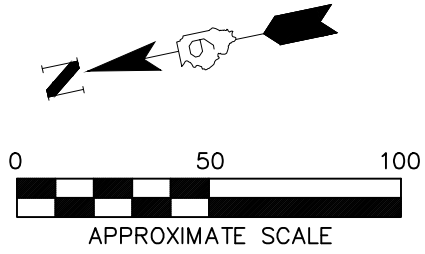
Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend


- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement





| | | | |
|----------------------|--|---|---|
| WORK ORDER 28 | | FIGURE 11 BORING LOCATIONS MAP | |
| DESIGNED: XXX | | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN: GAP | | | |
| CHECKED: XXX | | | |
| DATE: 9/26/2017 | | | |

Depth PID pH

pH pH readings exceed background (6.25-9.0)

 Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

 Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

 Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

3160-36
UPRR
REC: YES

MATCH LINE
STA. 63+00

MATCH LINE
STA. 77+00

FOREST BAPTIST CHURCH RD.

3160-50
VACANT LAND
REC: YES

3160-45
RESIDENCE
REC: YES

Legend


 Soil Boring Location

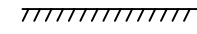
 Proposed R.O.W. Acquisition

 Limits of construction

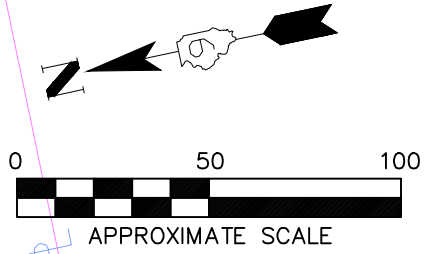
 Existing Right-of-Way

 Proposed Right-of-Way

 Proposed Right-of-Way Permanent Easement

 Existing Right-of-Way Easement

 Proposed Right-of-Way Temp Easement



WORK ORDER 28

**FIGURE 12
BORING LOCATIONS MAP**

DESIGNED XXX
DRAWN GAP
CHECKED XXX
DATE 9/26/2017





4232 N. BRANDYWINE DR.
SUITE A
PEORIA, ILLINOIS 61614
PH (309) 692-4422
FX (309) 692-9364


IDOT JOB #: D-99-037-03
CONTRACT NO.: 98820
DISTRICT 9
FAS 2882
S. Corporate Limit in Benton to Yellow Banks Road

Depth PID pH

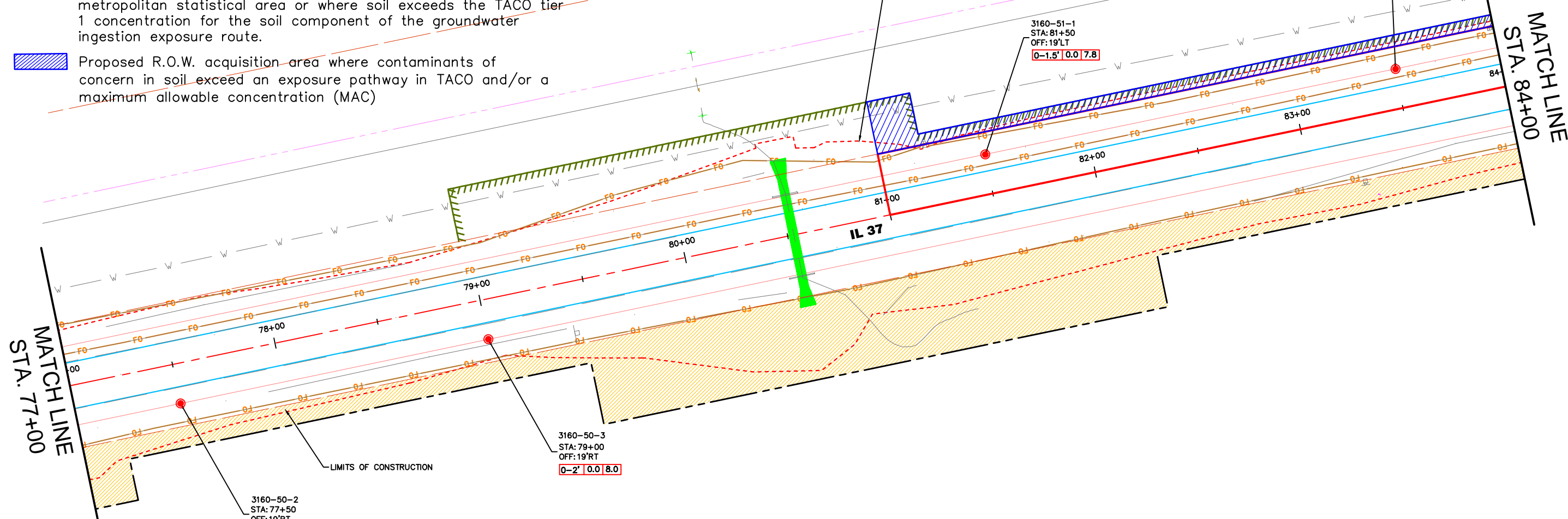
pH pH readings exceed background (6.25-9.0)

 Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

 Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

 Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

3160-51
UPRR
REC: YES





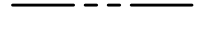
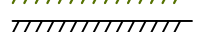




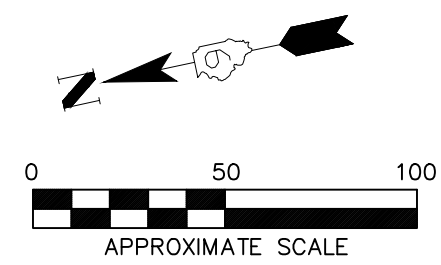
MATCH LINE
STA. 77+00

MATCH LINE
STA. 84+00


3160-50
VACANT LAND
REC: YES

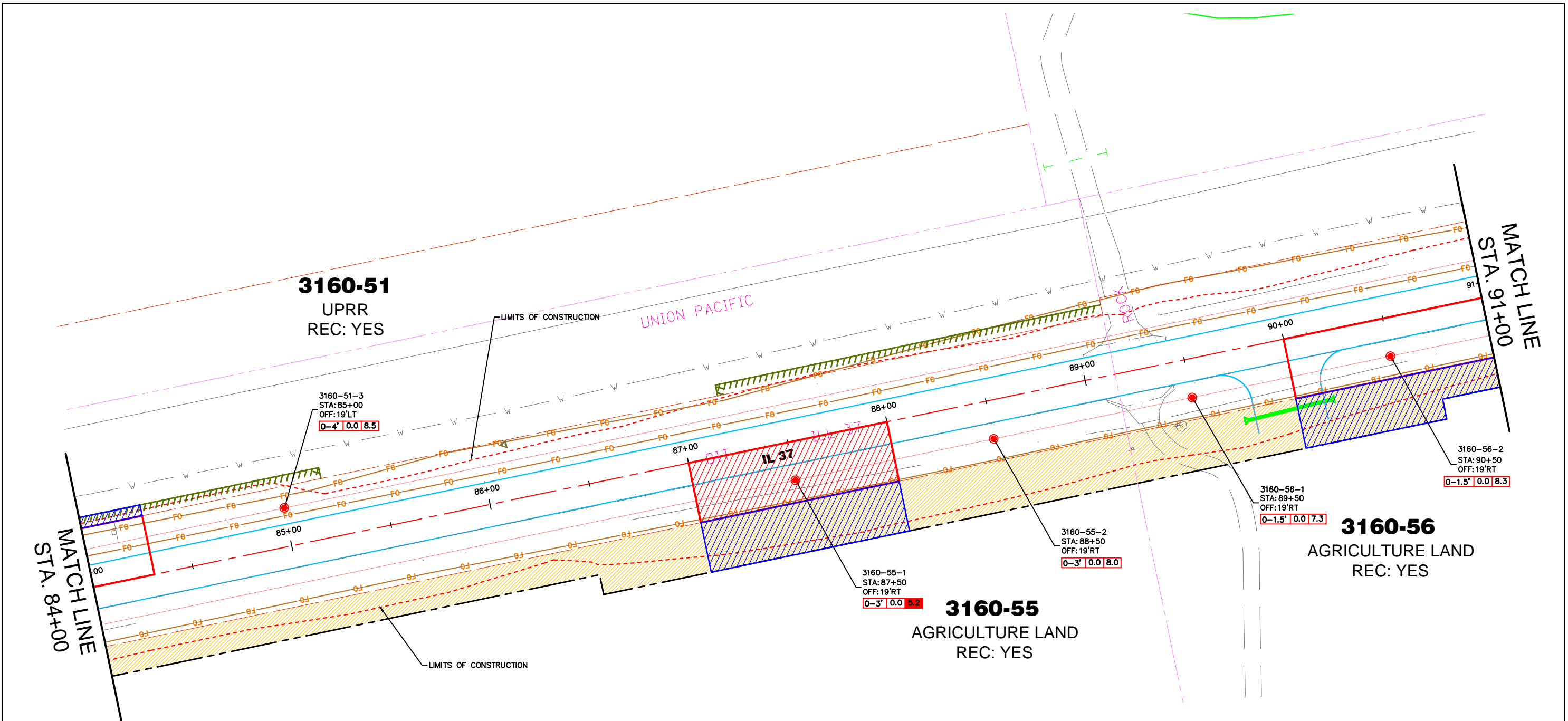
Legend

-  Soil Boring Location
-  Proposed R.O.W. Acquisition
-  Limits of construction
-  Existing Right-of-Way
-  Proposed Right-of-Way
-  Proposed Right-of-Way Permanent Easement
-  Existing Right-of-Way Easement
-  Proposed Right-of-Way Temp Easement



WORK ORDER 28 **FIGURE 13**
BORING LOCATIONS MAP

| | | | | |
|-----------------------|---|---|---|--|
| DESIGNED <u>XXX</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |
| DRAWN <u>GAP</u> | | | | |
| CHECKED <u>XXX</u> | | | | |
| DATE <u>9/26/2017</u> | | | | |



MATCH LINE
STA. 84+00

MATCH LINE
STA. 91+00

3160-51
UPRR
REC: YES

3160-56
AGRICULTURE LAND
REC: YES

3160-55
AGRICULTURE LAND
REC: YES

| | | |
|-------|-----|----|
| Depth | PID | pH |
|-------|-----|----|

pH pH readings exceed background (6.25–9.0)

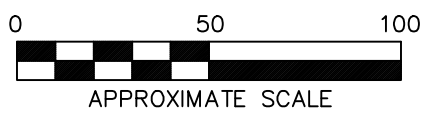
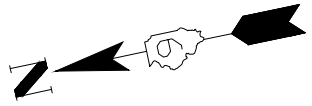
 Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25–9.0 S.U.)

 Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

 Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

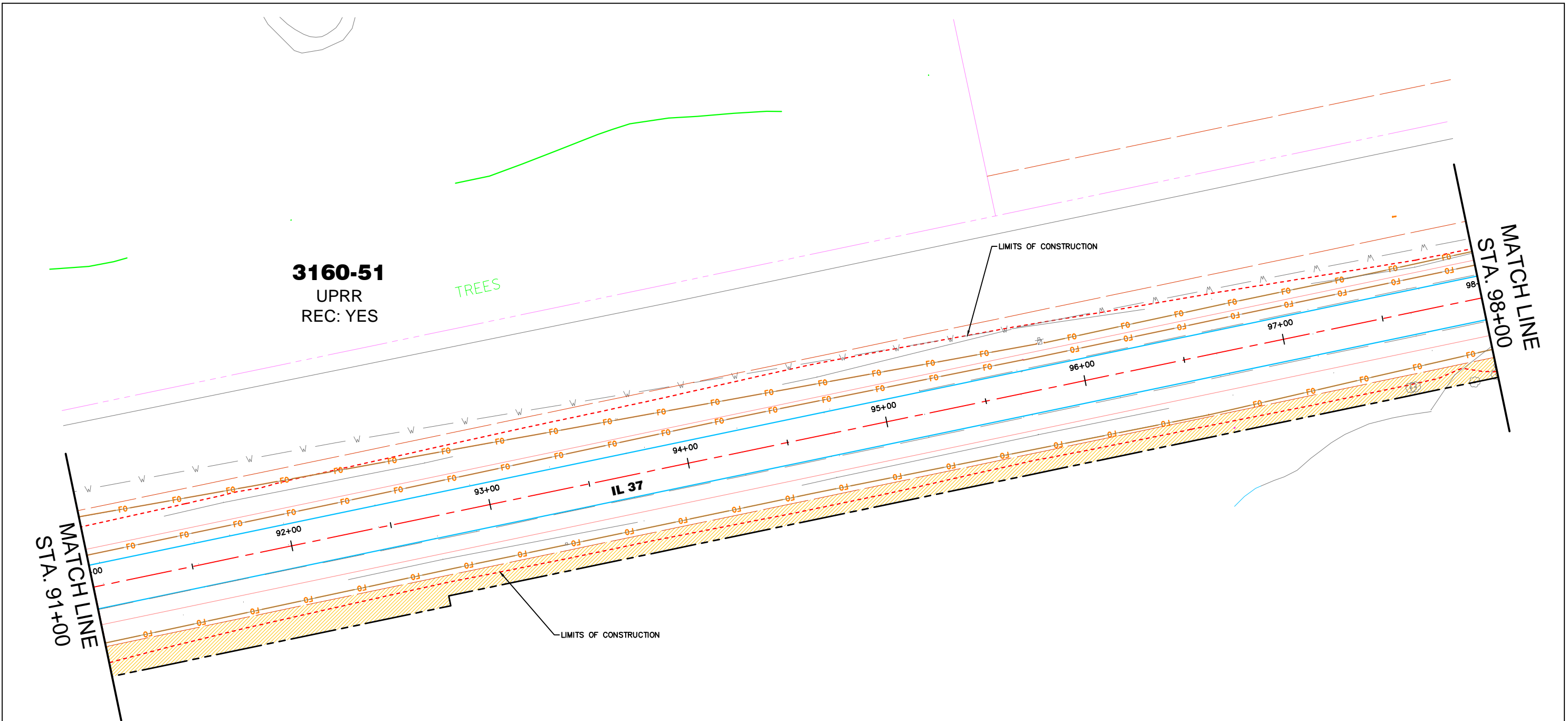
Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- //// Proposed Right-of-Way Permanent Easement
- //// Existing Right-of-Way Easement
- //// Proposed Right-of-Way Temp Easement






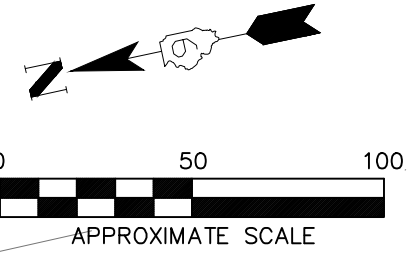
| | |
|----------------------|---|
| WORK ORDER 28 | FIGURE 14 BORING LOCATIONS MAP |
|----------------------|---|

| | | | |
|--|--|---|---|
| DESIGNED: XXX DRAWN: GAP CHECKED: XXX DATE: 9/26/2017 | | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
|--|--|---|---|






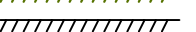





pH pH readings exceed background (6.25–9.0)

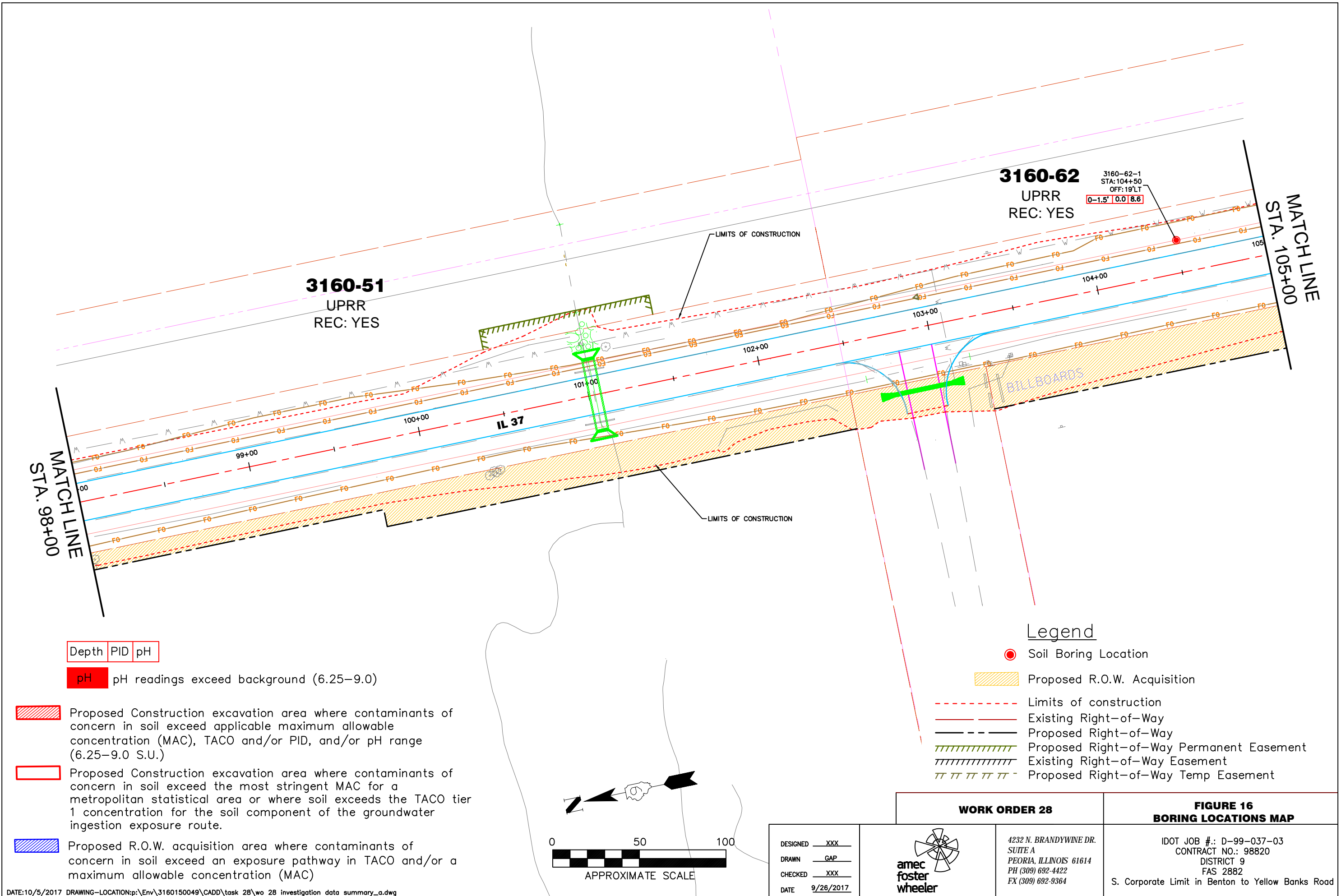
-  Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25–9.0 S.U.)
-  Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
-  Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

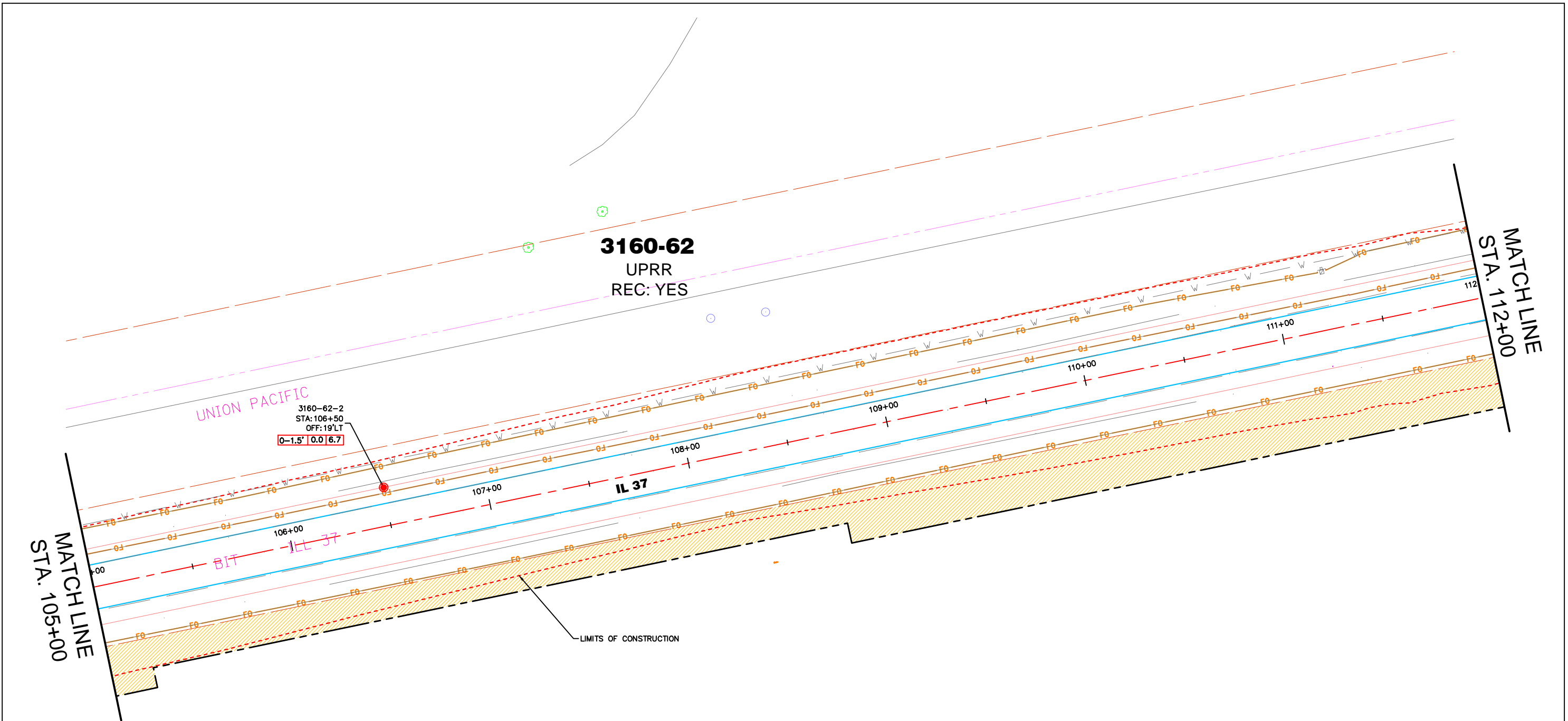


Legend

-  Soil Boring Location
-  Proposed R.O.W. Acquisition
-  Limits of construction
-  Existing Right-of-Way
-  Proposed Right-of-Way
-  Proposed Right-of-Way Permanent Easement
-  Existing Right-of-Way Easement
-  Proposed Right-of-Way Temp Easement

| | | | |
|-----------------------|---|---|---|
| WORK ORDER 28 | | FIGURE 15 BORING LOCATIONS MAP | |
| DESIGNED <u>XXX</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN <u>GAP</u> | | | |
| CHECKED <u>XXX</u> | | | |
| DATE <u>9/26/2017</u> | | | |





| Depth | PID | pH |
|-------|-----|----|
|-------|-----|----|

pH pH readings exceed background (6.25-9.0)

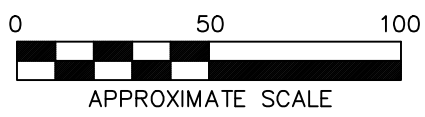
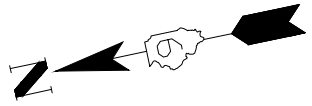
Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)

Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.

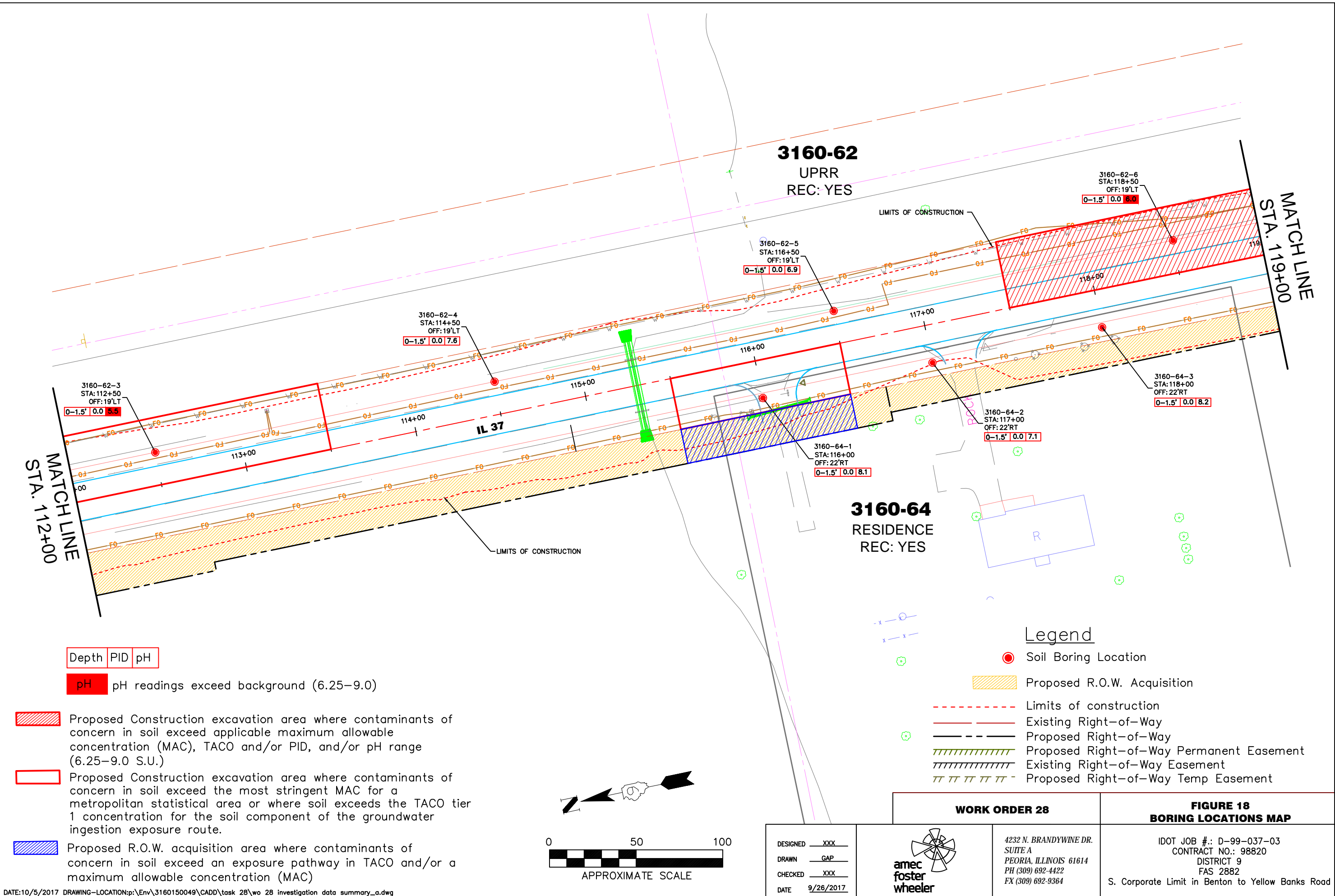
Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

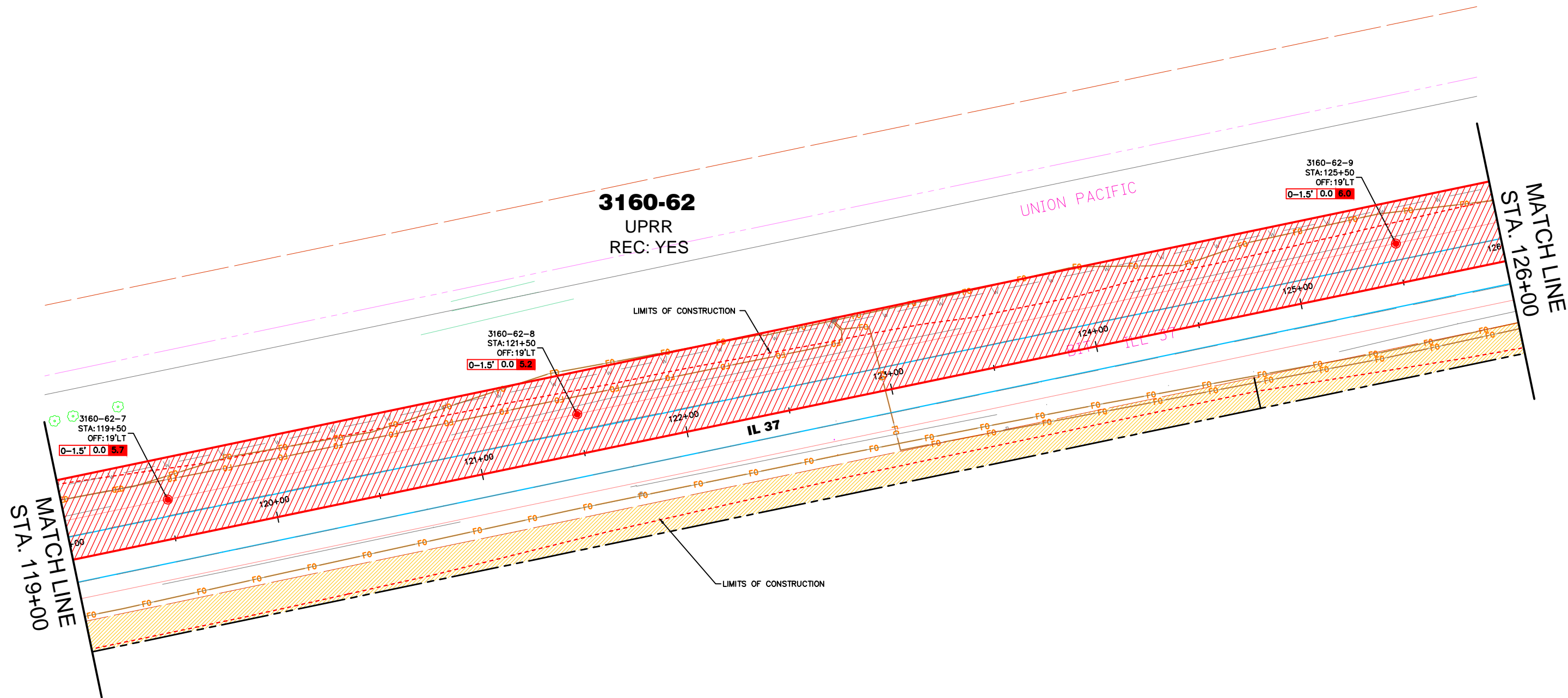
Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement






| WORK ORDER 28 | | FIGURE 17 BORING LOCATIONS MAP | |
|---------------|-----------|-----------------------------------|---|
| DESIGNED | XXX | | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| DRAWN | GAP | | |
| CHECKED | XXX | | |
| DATE | 9/26/2017 | | |
| | | | |







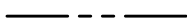

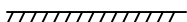



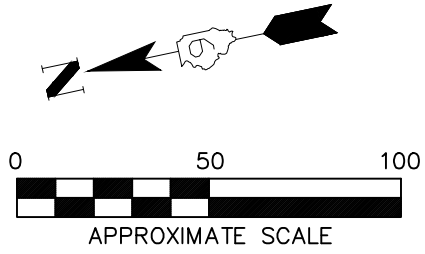
| Depth | PID | pH |
|-------|-----|----|
|-------|-----|----|


pH pH readings exceed background (6.25-9.0)

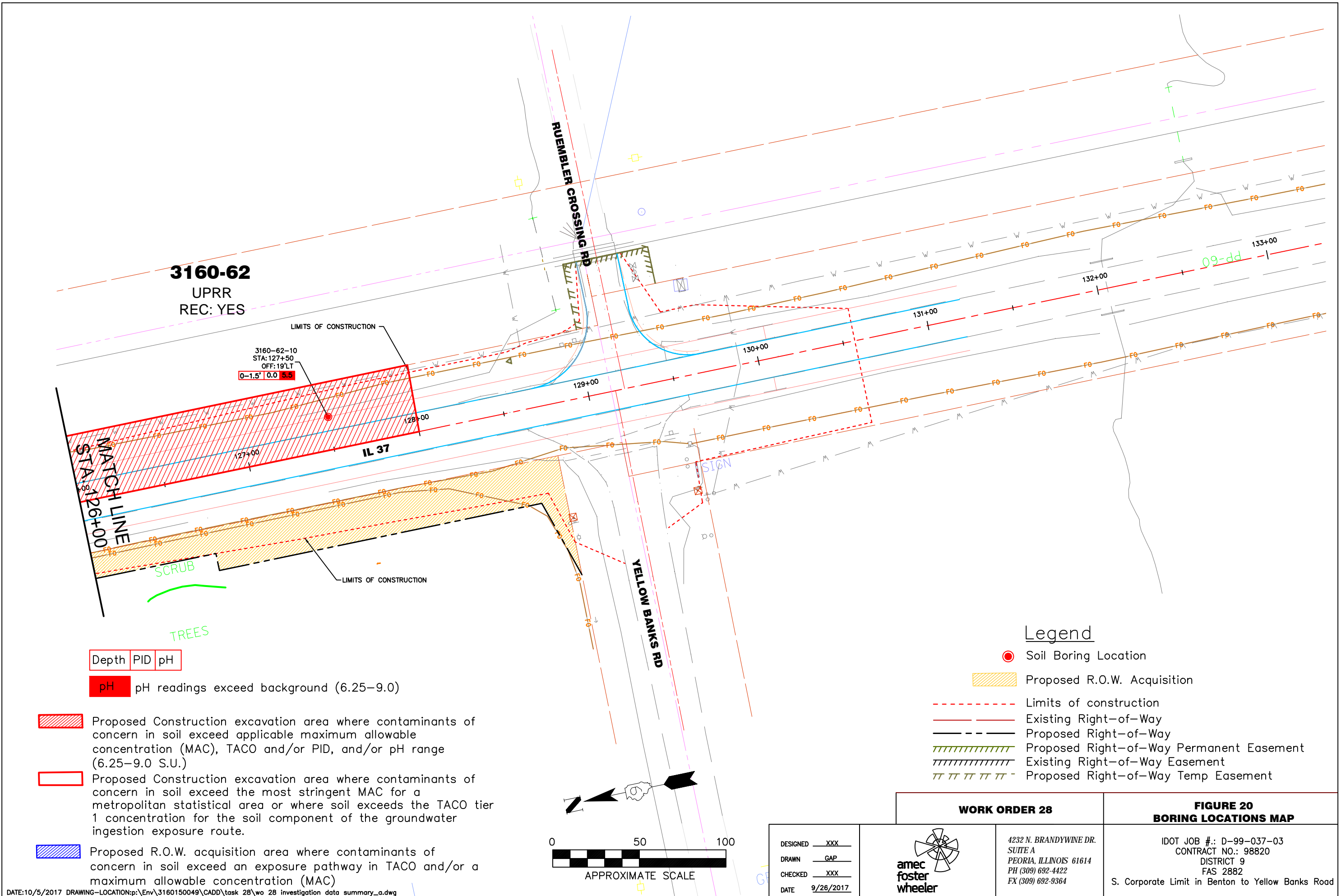
-  Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)
-  Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
-  Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

-  Soil Boring Location
-  Proposed R.O.W. Acquisition
-  Limits of construction
-  Existing Right-of-Way
-  Proposed Right-of-Way
-  Proposed Right-of-Way Permanent Easement
-  Existing Right-of-Way Easement
-  Proposed Right-of-Way Temp Easement



| WORK ORDER 28 | | FIGURE 19 BORING LOCATIONS MAP | |
|---------------|-----------|---|---|
| DESIGNED | XXX | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN | GAP |  | |
| CHECKED | XXX | | |
| DATE | 9/26/2017 | | |



3160-62
UPRR
REC: YES

3160-62-10
STA: 127+50
OFF: 19'LT
0-1.5' 0.0 8.5

MATCH LINE
STA: 126+00

IL 37

SCRUB
TREES

RUEMBLER CROSSING RD

YELLOW BANKS RD

SIGN

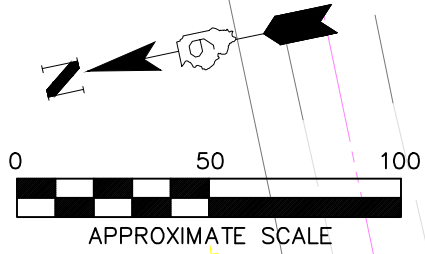
| | | |
|-------|-----|----|
| Depth | PID | pH |
|-------|-----|----|

pH pH readings exceed background (6.25-9.0)

- Proposed Construction excavation area where contaminants of concern in soil exceed applicable maximum allowable concentration (MAC), TACO and/or PID, and/or pH range (6.25-9.0 S.U.)
- Proposed Construction excavation area where contaminants of concern in soil exceed the most stringent MAC for a metropolitan statistical area or where soil exceeds the TACO tier 1 concentration for the soil component of the groundwater ingestion exposure route.
- Proposed R.O.W. acquisition area where contaminants of concern in soil exceed an exposure pathway in TACO and/or a maximum allowable concentration (MAC)

Legend

- Soil Boring Location
- Proposed R.O.W. Acquisition
- Limits of construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Proposed Right-of-Way Permanent Easement
- Existing Right-of-Way Easement
- Proposed Right-of-Way Temp Easement



| | |
|---|---|
| WORK ORDER 28 | FIGURE 20 BORING LOCATIONS MAP |
| DESIGNED: XXX DRAWN: GAP CHECKED: XXX DATE: 9/26/2017 | <div style="text-align: center;"> </div> <p>4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364</p> |
| IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Sample ID | 3160-5-1 (0-1.2') | | 3160-5-2 (0-1.2') | | 3160-5-3 (0-1.2') | | 3160-8-1 (0-3) | | 3160-8-2 (0-3) | | 3160-9-1 (0-4.0') | | 3160-9-2 (0-4') | | 3160-9-3 (0-4') | | 3160-10-1 (0-2.5') | | 3160-10-2 (0-2.5') | | Maximum Allowable Concentrations | | | | | | TACO Remediation Objectives | | | |
|---------------------------|--------------------|------------|-------------------|------------|-------------------|------------|----------------|------------|----------------|------------|-------------------|------------|-----------------|------------|-----------------|------------|--------------------|------------|--------------------|------------|----------------------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|
| | Sample Depth (ft.) | 0-1.2 | 0-1.2 | 0-1.2 | 0-3 | 0-3 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-2.5 | 0-2.5 | 0-2.5 | 0-2.5 | 0-2.5 | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Groundwater Protection Objective ⁹ and (TCLP/SPLP) ¹⁰ |
| Sample Date | 11/02/2017 | 11/02/2017 | 11/02/2017 | 11/03/2017 | 11/03/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | 10/30/2017 | | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 380 | 347 | | | | | | | | | | | | | |
| Sample pH | 8.6 | 6.1 | 8.0 | 8.5 | 8.3 | 4.6 | 5.4 | 7.6 | 5.4 | 4.8 | | | | | | | | | | | | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | | | | | |
| VOCs (mg/kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | NA | NA | NA | <0.0019 | <0.0017 | <0.0019 | <0.0020 | <0.0016 | 0.65 | 1.9 | <0.0020 | 0.03 | NA | NA | NA | NA | NA | NA | NA | NA | 0.03 | NA | NA | NA | NA | NA | 2.2 | 0.03 | | |
| SVOCS (mg/kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Naphthalene | NA | NA | NA | 0.053 | 0.00691 | <0.039 | <0.039 | 0.0231 | 0.37 | 2.35 | <0.038 | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | NA | 1.8 | 170 | | | | | | | | | |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | 13 | 1.7 | 4.7 | 5.1 | 7.9 | 8.1 | 6.2 | 6.5 | 6.6 | 7.8 | 7.7 | 11.3 | NA | NA | 13.0 | NA | NA | 11.3 | 61 | 750 | | | | | | | | | | |
| Iron | 16000 | 1,47 | 20000 | 1,47 | 13000 | 15000 | 15000 | 16000 | 1,47 | 16000 | 1,47 | 15000 | 18000 | 1,47 | 20000 | 1,47 | 15,000 | NA | NA | 15,900 | NA | NA | NA | NA | NA | 15,000 | NA | NA | NA | |
| Lead | 110 | 1 | 43 | 73 | 82 | 54 | 9.6 | 11 | 46 | 14 | 12 | 107 | NA | NA | NA | NA | 107 | NA | NA | NA | NA | NA | NA | NA | NA | 700 | 400 | | | |
| Manganese | 310 | 110 | 270 | 440 | 720 | 1,47 | 150 | 210 | 210 | 210 | 210 | 630 | NA | NA | 636 | NA | 630 | NA | NA | 630 | 4,100 | 1,600 | | | | | | | | |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.089 | 0.038 | 0.089 | 0.029 | 0.10 | 0.28 | 10 | 0.072 | 0.030 | 3.0 | 10 | 0.066 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | NA | NA | NA | NA | NA | 0.21 | 10 | NA | NA | 0.34 | 10 | NA | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | |

Notes:

- NA= Not available
 - ND= Not detected above laboratory reporting limit
 - NT= Not tested
 - mg/kg= Milligrams per kilogram
 - mg/L= Milligrams per liter
 - TCLP= Toxicity Characteristic Leaching Procedure
 - SPLP= Synthetic Precipitation Leaching Procedure
 - MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
 - TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCS-D) is outside acceptance limits.
 - ^= Instrument related QC is outside acceptance limits.
 - B= Compound was found in the blank and sample.
 - J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
 - FI= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
 - F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
 - CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC (1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

- Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both
- CCDD Eligible- metals exceed TCLP and SPLP but not Totals
- CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability
- Greater than TACO Construction Worker Exposure Objectives
- Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0)

| | |
|---|---|
| WORK ORDER 28 | FIGURE 21 CONTAMINANTS OF CONCERN |
| DESIGNED <u>XXX</u> DRAWN <u>GAP</u> CHECKED <u>XXX</u> DATE <u>7/17/2017</u> | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Sample ID | Sample Information | | | | | | | | | | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | | |
|---------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|--------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|-------|
| | 3160-10-3 (0-2.5') | 3160-16-1 (0-4') | 3160-16-2 (0-4') | 3160-16-3 (0-4') | 3160-16-4 (0-4') | 3160-16-5 (0-4') | 3160-21-1 (0-2.5') | 3160-21-2 (0-2.5') | 3160-21-3 (0-2.5') | 3160-21-4 (0-2.5') | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ | |
| Sample Depth (ft.) | 0-2.5 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-2.5 | 0-2.5 | 0-2.5 | 0-2.5 | | | | | | | | | | |
| Sample Date | 10/30/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 11/02/2017 | 11/02/2017 | 11/02/2017 | 11/02/2017 | | | | | | | | | | |
| PID | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| Sample pH | 8.2 | 6.3 | 5.6 | 4.9 | 7.9 | 6.0 | 8.3 | 8.2 | 7.0 | 8.0 | | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | | | | | |
| SVOs (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | <0.082 | 0.0131 | <0.077 | <0.075 | 0.34 | 3,6 | 0.26 | 3 | <0.079 | 0.18 | 3 | <0.076 | 0.0441 | NA | NA | 0.14 | NA | NA | 0.29 | NA |
| Naphthalene | <0.041 | <0.037 | <0.038 | <0.037 | 0.20 | 2 | 0.17 | 2 | <0.039 | 0.081 | 2 | <0.037 | 0.0231 | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| Chromium | 21 | 16 | 17 | 19 | 9.5 | 14 | 13 | 11 | 24 | 1 | 16 | 21 | NA | NA | NA | NA | NA | NA | 690 | 230 |
| Iron | 19000 | 1,4,7 | 17000 | 1,4,7 | 19000 | 1,4,7 | 16000 | 1,4,7 | 16000 | 1,4,7 | 17000 | 1,4,7 | 16000 | 1,4,7 | 22000 | 1,4,7 | 18000 | 1,4,7 | 15,000 | NA |
| Manganese | 250 | 1600 | 1,4,7 | 170 | 170 | 180 | 350 | 370 | 3200 | 1,4,7,9 | 310 | 630 | NA | NA | 636 | NA | NA | 630 | 4,100 | 1,600 |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | 7.6 | 10 | 0.41 | 0.72 | <0.40 | 0.41 | 0.291 | 0.241 | 0.231 | 0.241 | <0.40 | -- | -- | -- | -- | -- | -- | -- | -- | 5 |
| Manganese | 4.1 | 10 | 0.0111 | 0.0171 | 0.0131 | 0.027 | 0.0101 | 0.0141 | 0.085 | 0.029 | 0.29 | 10 | -- | -- | -- | -- | -- | -- | -- | 0.15 |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | 88 | 10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | 5 |
| Manganese | 0.61 | 10 | NA | NA | NA | NA | NA | NA | NA | NA | 0.056 | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 |

Notes:

- NA= Not available
- ND= Not detected above laboratory reporting limit
- NT= Not tested
- mg/kg= Milligrams per kilogram
- mg/L= Milligrams per liter
- TCLP= Toxicity Characteristic Leaching Procedure
- SPLP= Synthetic Precipitation Leaching Procedure
- MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
- TACO = Tiered Approach to Corrective Action Objectives

- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LSD) is outside acceptance limits.
- ^= Instrument related QC is outside acceptance limits.
- B= Compound was found in the blank and sample.
- J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
- F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
- F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
- CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC (1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

| | |
|--|--|
| | Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not Totals |
| | CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| | CCDD Eligible- VOCs or SVOs exceedances; limited CCDD disposal availability |
| | Greater than TACO Construction Worker Exposure Objectives |
| | Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


| | | | |
|----------------------|-----------------------|---|---|
| WORK ORDER 28 | | FIGURE 22 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> | DRAWN <u>GAP</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| CHECKED <u>XXX</u> | DATE <u>7/17/2017</u> | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)
Benton, Franklin County, Illinois

| Sample ID | Sample Location | | | | | | | | | | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | | |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|------------------|------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|------|
| | 3160-21-5 (0-2.5') | 3160-21-6 (0-2.5') | 3160-21-7 (0-2.5') | 3160-21-8 (0-2.5') | 3160-21-9 (0-2.5') | 3160-21-10 (0-2.5') | 3160-23-1 (0-4.5') | 3160-23-2 (0-4.5') | 3160-25-1 (0-4') | 3160-25-2 (0-4') | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ | |
| Sample Depth (ft.) | 0-2.5 | 0-2.5 | 0-2.5 | 0-2.5 | 0-2.5 | 0-2.5 | 0-4.5 | 0-4.5 | 0-4 | 0-4 | | | | | | | | | | |
| Sample Date | 11/02/2017 | 11/02/2017 | 11/02/2017 | 11/02/2017 | 11/02/2017 | 11/02/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| Sample pH | 7.8 | 5.5 | 7.6 | 6.4 | 7.9 | 7.6 | 6.2 | 8.1 | 4.8 | 4.8 | | | | | | | | | | |
| Matrix | Soil | | | | | | | | | | | | | | | | | | | |
| SVOCs (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | 0.016J | <0.083 | 0.055J | <0.079J | 0.071J | 0.13 | 0.0091J | 0.25 | <0.081 | <0.077 | NA | NA | 0.14 | NA | NA | 0.29 | NA | NA | NA | |
| Naphthalene | <0.041 | <0.041 | 0.026J | <0.039J | 0.033J | 0.059 | <0.036 | 0.12 | <0.040 | <0.038 | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | 1.8 | 170 | |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| Iron | 20000 | 1,47 | 28000 | 1,47 | 17000 | 1,47 | 22000 | 1,47 | 18000 | 1,47 | 19000 | 1,47 | 12000 | 12000 | 20000 | 1,47 | 21000 | 1,47 | 15,000 | NA |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.027 | 0.085 | 0.035 | 0.055 | 0.018J | 0.096 | 0.057 | 0.077 | 4.8 | 10 | 0.018J | | | | | | | | | 0.15 |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | 0.43 | 10 | NA | | | | | | | | | 0.15 |

Notes:

- NA= Not available
 - ND= Not detected above laboratory reporting limit
 - NT= Not tested
 - mg/kg= Milligrams per kilogram
 - mg/L= Milligrams per liter
 - TCLP= Toxicity Characteristic Leaching Procedure
 - SPLP= Synthetic Precipitation Leaching Procedure
 - MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
 - TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCS/D) is outside acceptance limits.
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 - B= Compound was found in the blank and sample.
 - J= Result is less than the reporting limit but greater than or equal to the method detection limit; concentration reported as an approximate value.
 - F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
 - F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
 - CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC 1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

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| Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| Greater than TACO Construction Worker Exposure Objectives |
| Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


| | | | |
|------------------------|---|---|---|
| WORK ORDER 28 | | FIGURE 23 CONTAMINANTS OF CONCERN | |
| DESIGNED: <u>XXX</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN: <u>GAP</u> | | | |
| CHECKED: <u>XXX</u> | | | |
| DATE: <u>7/17/2017</u> | | | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)
Benton, Franklin County, Illinois

| Sample ID | Sample Location | | | | | | | | | | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | |
|---------------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|
| | 3160-26-1 (0-4') | 3160-26-2 (0-4') | 3160-28-1 (0-5') | 3160-28-2 (0-5') | 3160-28-3 (0-5') | 3160-32-1 (0-3.5') | 3160-32-2 (0-3.5') | 3160-32-3 (0-3.5') | 3160-32-4 (0-3.5') | 3160-32-5 (0-3.5') | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ |
| Sample Depth (ft.) | 0-4 | 0-4 | 0-5 | 0-5 | 0-5 | 0-3.5 | 0-3.5 | 0-3.5 | 0-3.5 | 0-3.5 | | | | | | | | | |
| Sample Date | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | |
| Sample pH | 5.0 | 4.3 | 4.3 | 4.9 | 3.8 | 6.4 | 6.6 | 6.7 | 6.7 | 5.9 | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | | | | |
| SVOCs (mg/kg) | | | | | | | | | | | | | | | | | | | |
| Naphthalene | <0.038 | <0.038 | <0.040 | 0.011J | 2.5, 1.2, 3.6 | <0.040 | 0.027J | 0.0069J | 0.32, 2.3, 6 | 0.018J | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | 1.8 | 170 |
| Phenanthrene | <0.038 | <0.038 | <0.040 | 0.021J | 0.97 | 0.0097J | 0.057 | 0.022J | 1.2, 1.6 | 0.087 | 0.99 | 1.3 | 2.5 | NA | 2.5 | 0.99 | NA | NA | NA |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | |
| Arsenic | 9.5 | 6.4 | 8.1 | 7.4 | 11 | 5.1 | 14, 1.4, 7 | 9.9 | 11 | 7.1 | 11.3 | NA | NA | 13.0 | NA | NA | 11.3 | 61 | 750 |
| Chromium | 19 | 20 | 21 | 18 | 13 | 12 | 30, 1 | 17 | 14 | 16 | 21 | NA | NA | NA | NA | NA | NA | 690 | 230 |
| Iron | 21000, 1.4, 7 | 20000, 1.4, 7 | 22000, 1.4, 7 | 21000, 1.4, 7 | 16000, 1.4, 7 | 14000 | 35000, 1.4, 7 | 25000, 1.4, 7 | 26000, 1.4, 7 | 19000, 1.4, 7 | 15,000 | NA | NA | 15,900 | NA | NA | 15,000 | NA | NA |
| Manganese | 540 | 140 | 140 | 270 | 65 | 660, 1.4, 7 | 1600, 1.4, 7 | 480 | 110 | 180 | 630 | NA | NA | 636 | NA | NA | 630 | 4,100 | 1,600 |
| Selenium | 0.86 | <0.59 | 0.89 | 0.63 | 1.9, 1 | 1.1 | 1.7, 1 | 0.83 | 1.7, 1 | 0.55J | 1.3 | NA | NA | NA | NA | NA | NA | 1,000 | 390 |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.85, 10 | 0.10 | 0.74, 10 | 0.25, 10 | 0.84, 10 | <0.025 | <0.025 | 0.065 | 0.026 | 0.080 | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.14 | NA | 0.099 | 0.075 | 0.44, 10 | NA | NA | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 |

Notes:

- NA= Not available
 - ND= Not detected above laboratory reporting limit
 - NT= Not tested
 - mg/kg= Milligrams per kilogram
 - mg/L= Milligrams per liter
 - TCLP= Toxicity Characteristic Leaching Procedure
 - SPLP= Synthetic Precipitation Leaching Procedure
 - MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
 - TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCS/D) is outside acceptance limits.
 - = Instrument related QC is outside acceptance limits.
 - B= Compound was found in the blank and sample.
 - J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
 - F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
 - F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
 - CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC 1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

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| Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| Greater than TACO Construction Worker Exposure Objectives |
| Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


| | | | |
|-----------------------|---|---|---|
| WORK ORDER 28 | | FIGURE 24 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN <u>GAP</u> | | | |
| CHECKED <u>XXX</u> | | | |
| DATE <u>7/17/2017</u> | | | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Sample ID | 3160-32-6 (0-3.5') | | 3160-32-7 (0-3.5') | | 3160-36-1 (0-3') | | 3160-36-2 (0-3') | | 3160-36-3 (0-3') | | 3160-36-4 (0-3') | | 3160-36-5 (0-3') | | 3160-36-6 (0-3') | | 3160-36-7 (0-3') | | 3160-36-8 (0-3') | | Maximum Allowable Concentrations | | | | | | TACO Remediation Objectives | | | | | |
|---------------------------|--------------------|-------|--------------------|-------|------------------|-------|------------------|-------|------------------|-----|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|---------|----------------------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|--|--|
| | Sample Depth (ft.) | 0-3.5 | 0-3.5 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | 0-3 | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ | | |
| Sample Date | 10/31/2017 | | 11/21/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | 11/02/2017 | | | | | | | | | | | |
| PID | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | | | | | | | | | | |
| Sample pH | 4.6 | | 5.4 | | 7.0 | | 5.0 | | 4.6 | | 4.6 | | 4.6 | | 4.3 | | 4.8 | | 7.9 | | | | | | | | | | | | | |
| Matrix | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | | | | | | | | | | | | |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cobalt | 5.4 | | 4.3 | | 14 | | 8.7 | | 3.2 | | 8.1 | | 6.5 | | 5.0 | | 4.7 | | 27 | 1 | 20 | NA | NA | NA | NA | NA | NA | 12,000 | 4,700 | | | |
| Iron | 21000 | 1,4,7 | 25000 | 1,4,7 | 15000 | | 20000 | 1,4,7 | 14000 | | 19000 | 1,4,7 | 19000 | 1,4,7 | 22000 | 1,4,7 | 20000 | 1,4,7 | 19000 | 1,4,7 | 15,000 | NA | NA | 15,900 | NA | NA | 15,000 | NA | NA | | | |
| Manganese | 190 | | 180 | | 910 | 1,4,7 | 430 | | 140 | | 820 | 1,4,7 | 150 | | 120 | | 140 | | 3700 | 1,4,7,9 | 630 | NA | NA | 636 | NA | NA | 630 | 4,100 | 1,600 | | | |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.99 | 10 | 1.7 | 10 | 0.0231 | | 0.24 | 10 | 0.38 | 10 | 0.15 | | 0.28 | 10 | 0.21 | 10 | 0.23 | 10 | 0.0111 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | | |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.17 | 10 | 0.2 | 10 | NA | | 0.049 | | 0.084 | | NA | | 0.073 | | 0.078 | | 0.26 | 10 | NA | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | | |

Notes:

- NA= Not available
 - ND= Not detected above laboratory reporting limit
 - NT= Not tested
 - mg/kg= Milligrams per kilogram
 - mg/L= Milligrams per liter
 - TCLP= Toxicity Characteristic Leaching Procedure
 - SPLP= Synthetic Precipitation Leaching Procedure
 - MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
 - TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) is outside acceptance limits.
 - ^= Instrument related QC is outside acceptance limits.
 - B= Compound was found in the blank and sample.
 - J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
 - F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
 - F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
 - CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC 1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

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| Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| Greater than TACO Construction Worker Exposure Objectives |
| Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


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|----------------------|-----------------------|---|---|
| WORK ORDER 28 | | FIGURE 25 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> | DRAWN <u>GAP</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| CHECKED <u>XXX</u> | DATE <u>7/17/2017</u> | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Sample ID | Sample Location | | | | | | | | | | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | | |
|---------------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|---|--|
| | 3160-36-9 (0-3') | 3160-36-10 (0-3') | 3160-36-11 (0-3') | 3160-45-1 (0-5') | 3160-45-1 (5-6') | 3160-45-2 (0-5') | 3160-45-2 (5-6') | 3160-45-3 (0-5') | 3160-45-3 (5-6') | 3160-45-4 (0-5') | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPL) ¹⁰ | |
| Sample Depth (ft.) | 0-3 | 0-3 | 0-3 | 0-5 | 5-6 | 0-5 | 5-6 | 0-5 | 5-6 | 0-5 | | | | | | | | | | |
| Sample Date | 11/02/2017 | 11/02/2017 | 11/02/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| Sample pH | 8.7 | 6.6 | 5.3 | 8.0 | 7.8 | 7.7 | 7.5 | 8.1 | 7.7 | 6.3 | | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | | | | | |
| SVOCs (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| Benzo[a]pyrene | 0.17 | 1.6 | 0.032J | <0.041 | <0.040 | 0.0085J | <0.039 | <0.039 | <0.036 | 0.039 | 0.09 | 1.3 | 2.1 | NA | 0.98 | 0.09 | NA | 17 | 0.09 | |
| 2-Methylnaphthalene | 0.26 | 3 | 0.010J | <0.083 | <0.080 | <0.081 | <0.079 | 0.0091J | <0.074 | 0.035J | NA | NA | 0.14 | NA | NA | 0.29 | NA | NA | NA | |
| Naphthalene | 0.11 | 2 | <0.039 | <0.041 | <0.040 | <0.040 | <0.039 | 0.0063J | <0.036 | 0.016J | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | 1.8 | 170 | |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| Cobalt | 7.5 | 5.5 | 3.4 | 9.8 | 13 | 12 | 12 | 12 | 22 | 1 | 14 | 9.2 | 20 | NA | NA | NA | NA | 12,000 | 4,700 | |
| Iron | 18000 | 1,47 | 19000 | 1,47 | 19000 | 1,47 | 20000 | 1,47 | 18000 | 1,47 | 18000 | 1,47 | 17000 | 1,47 | 50000 | 1,47 | 24000 | 1,47 | 13000 | |
| Lead | 250 | 1 | 27 | 13 | 27 | 18 | 49 | 15 | 78 | 15 | 107 | 15 | 107 | NA | NA | NA | NA | 700 | 400 | |
| Manganese | 410 | 220 | 84 | 400 | 880 | 1,47 | 540 | 530 | 660 | 1,47 | 770 | 1,47 | 280 | 630 | NA | NA | 636 | NA | 1,600 | |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Lead | 0.019 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | -- | -- | -- | -- | -- | -- | -- | -- | 0.0075 | |
| Manganese | 0.038 | 10 | 0.041 | 0.054 | 0.019J | 0.031 | 0.015J | 0.060 | <0.025 | 0.12 | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Lead | 0.40 | 10 | NA | NA | NA | NA | NA | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | 0.0075 | |

Notes

- NA= Not available
- ND= Not detected above laboratory reporting limit
- NT= Not tested
- mg/kg= Milligrams per kilogram
- mg/L= Milligrams per liter
- TCLP= Toxicity Characteristic Leaching Procedure
- SPLP= Synthetic Precipitation Leaching Procedure
- MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
- TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) is outside acceptance limits.
- ^= Instrument related QC is outside acceptance limits.
- B= Compound was found in the blank and sample.
- J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
- FL= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
- FZ= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
- CCDD = Clean Construction Demolition on Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC (1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

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| | Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| | CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| | CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| | Greater than TACO Construction Worker Exposure Objectives |
| | Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


| | | | |
|----------------------|-----------------------|---|---|
| WORK ORDER 28 | | FIGURE 26 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> | DRAWN <u>GAP</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| CHECKED <u>XXX</u> | DATE <u>7/17/2017</u> | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Sample ID | Sample Information | | | | | | | | | | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | | |
|---------------------------|--------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|-----------------|-----------------|--------|----------------------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|
| | 3160-45-4 (5-6') | 3160-50-1 (0-2') | 3160-50-2 (0-2') | 3160-50-3 (0-2') | 3160-51-1 (0-1.5') | 3160-51-2 (0-1.5') | 3160-51-3 (0-1.5') | 3160-55-1 (0-3) | 3160-55-2 (0-3) | | | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ |
| Sample Depth (ft.) | 5-6 | 0-2 | 0-2 | 0-2 | 0-1.5 | 0-1.5 | 0-1.5 | 0-3 | 0-3 | | | | | | | | | | | |
| Sample Date | 10/31/2017 | 10/31/2017 | 10/31/2017 | 10/31/2017 | 11/02/2017 | 11/02/2017 | 11/02/2017 | 11/01/2017 | 11/01/2017 | | | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | |
| Sample pH | 6.5 | 6.2 | 7.8 | 8.0 | 7.8 | 8.9 | 8.5 | 5.2 | 8.0 | | | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | | | | | | |
| SVOCs (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| Benzo[a]pyrene | <0.039 | <0.040 | <0.040 | 0.020J | 0.066 | 0.13 1,6 | 0.043 | 0.036J | 0.018J | 0.09 | 1.3 | 2.1 | NA | 0.98 | 0.09 | NA | 17 | 0.09 | | |
| Naphthalene | <0.039 | <0.040 | <0.040 | 0.030J | 0.044 2 | 0.063 2 | 0.0097J | <0.040 | <0.038 | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | 1.8 | 170 | | |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | | |
| Chromium | 15 | 15 | 20 | 22 1 | 15 | 21 | 15 | 17 | 22 | 21 | NA | NA | NA | NA | NA | NA | 690 | 230 | | |
| Iron | 13000 | 15000 | 22000 1,4,7 | 21000 1,4,7 | 16000 1,4,7 | 17000 1,4,7 | 16000 1,4,7 | 25000 1,4,7 | 23000 1,4,7 | 15,000 | NA | NA | 15,900 | NA | NA | 15,000 | NA | NA | | |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Lead | <0.0075 | <0.0075 | <0.0075 | <0.0075 | 0.011 10 | <0.0075 | <0.0075 | <0.0075 | <0.0075 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.0075 | |
| Manganese | 0.033 | 0.55 10 | 0.097 | 0.089 | 0.040 | 0.022J | 0.031 | 0.12 | 0.021J | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | |
| SPLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Lead | NA | NA | NA | NA | 0.21 10 | NA | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.0075 | |
| Manganese | NA | 0.39 10 | NA | NA | NA | NA | NA | NA | NA | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | |

Notes:

- NA= Not available
 - ND= Not detected above laboratory reporting limit
 - NT= Not tested
 - mg/kg= Milligrams per kilogram
 - mg/L= Milligrams per liter
 - TCLP= Toxicity Characteristic Leaching Procedure
 - SPLP= Synthetic Precipitation Leaching Procedure
 - MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
 - TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCS D) is outside acceptance limits.
 - ^= Instrument related QC is outside acceptance limits.
 - B= Compound was found in the blank and sample.
 - J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
 - F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
 - F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
 - CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC (1100.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

| | |
|--|--|
| | Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| | CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| | CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| | Greater than TACO Construction Worker Exposure Objectives |
| | Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


| | | | |
|----------------------|-----------------------|---|---|
| WORK ORDER 28 | | FIGURE 27 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> | DRAWN <u>GAP</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 |
| CHECKED <u>XXX</u> | DATE <u>7/17/2017</u> | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)
Benton, Franklin County, Illinois

| Sample ID | Sample Location | | | | | | | | | | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|
| | 3160-56-1 (0-1.5') | 3160-56-2 (0-1.5') | 3160-62-1 (0-1.5') | 3160-62-2 (0-1.5') | 3160-62-3 (0-1.5') | 3160-62-4 (0-1.5') | 3160-62-5 (0-1.5') | 3160-62-6 (0-1.5') | 3160-62-7 (0-1.5') | 3160-62-8 (0-1.5') | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ |
| Sample Depth (ft.) | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | | | | | | | | | |
| Sample Date | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | |
| Sample pH | 7.3 | 8.3 | 8.6 | 6.7 | 5.5 | 7.6 | 6.9 | 6.0 | 5.7 | 5.2 | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | | | | |
| SVOCs (mg/kg) | | | | | | | | | | | | | | | | | | | |
| Naphthalene | 0.0231 | 0.071 | 0.049 | 0.00801 | <0.038 | <0.039 | 0.00701 | 0.00751 | <0.038 | <0.038 | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | 1.8 | 170 |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | | |
| Chromium | 14 | 35 | 12 | 9.2 | 12 | 12 | 12 | 14 | 15 | 16 | 21 | NA | NA | NA | NA | NA | NA | 690 | 230 |
| Iron | 14000 | 16000 | 15000 | 9700 | 12000 | 10000 | 11000 | 15000 | 15000 | 18000 | 15,000 | NA | NA | 15,900 | NA | NA | 15,000 | NA | NA |
| Lead | 210 | 270 | 86 | 210 | 15 | 21 | 19 | 31 | 32 | 25 | 107 | NA | NA | NA | NA | NA | NA | 700 | 400 |
| Manganese | 720 | 980 | 900 | 170 | 370 | 250 | 670 | 720 | 490 | 670 | 630 | NA | NA | 636 | NA | NA | 630 | 4,100 | 1,600 |
| Selenium | 0.421 | 1.0 | 0.81 | 0.451 | 1.0 | 0.66 | 0.61 | 1.1 | 0.99 | 1.4 | 1.3 | NA | NA | NA | NA | NA | NA | 1,000 | 390 |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | | | | | |
| Manganese | 0.53 | 10 | 0.042 | 0.031 | 0.17 | 0.10 | 0.033 | 0.033 | 0.037 | 0.048 | 0.21 | 10 | -- | -- | -- | -- | -- | -- | 0.15 |

Notes:

- NA= Not available
 - ND= Not detected above laboratory reporting limit
 - NT= Not tested
 - mg/kg= Milligrams per kilogram
 - mg/L= Milligrams per liter
 - TCLP= Toxicity Characteristic Leaching Procedure
 - SPLP= Synthetic Precipitation Leaching Procedure
 - MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).
 - TACO = Tiered Approach to Corrective Action Objectives
- *= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) is outside acceptance limits.
 - ^= Instrument related QC is outside acceptance limits.
 - B= Compound was found in the blank and sample.
 - J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.
 - F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.
 - F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.
 - CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

- ¹ Exceeds the most stringent MAC value (35 IAC 110.605(e))
- ² Exceeds the Chicago Corporate Limits MAC values
- ³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value
- ⁴ Exceeds the Within a MSA County MAC value
- ⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value
- ⁶ Exceeds the Outside a Populated Area MAC value
- ⁷ Exceeds the Within a non-MSA County MAC value
- ⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective
- ⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective
- ¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective
- ¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

| |
|--|
| Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| Greater than TACO Construction Worker Exposure Objectives |
| Non-special Waste- Greater than all MACs, Greater than most stringent TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of the acceptable range (6.25 to 9.0) |


| | | | |
|-----------------------|---|---|---|
| WORK ORDER 28 | | FIGURE 28 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN <u>GAP</u> | | | |
| CHECKED <u>XXX</u> | | | |
| DATE <u>7/17/2017</u> | | | |

Table 4-2. Detected Soil Analytes and Comparison to Applicable Criteria

FAS 2882 (IL 37)

Benton, Franklin County, Illinois

| Sample ID | 3160-62-9 (0-1.5') | 3160-62-10 (0-1.5') | 3160-64-1 (0-1.5') | 3160-64-2 (0-1.5') | 3160-64-3 (0-1.5') | Maximum Allowable Concentrations | | | | | | | TACO Remediation Objectives | | |
|------------------------------------|--------------------|---------------------|--------------------|--------------------|--------------------|---|--|---|----------------------------------|--|---------------------------------------|--------------------------------------|--|--|--|
| | | | | | | Most Stringent Maximum Allowable Concentration ¹ | Within Chicago Corporate Limits ² | Within a Populated Area in a MSA (excluding Chicago) ³ | Within a MSA County ⁴ | Within a Populated Area in a non-MSA County ⁵ | Outside a Populated Area ⁶ | Within a non-MSA County ⁷ | Most Stringent TACO Tier 1 Construction Worker Exposure Objective ⁸ | Most Stringent TACO Tier 1 Residential Objective ⁹ and Groundwater Protection (TCLP/SPLP) ¹⁰ | |
| Sample Depth (ft.) | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | 0-1.5 | | | | | | | | | | |
| Sample Date | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | 11/01/2017 | | | | | | | | | | |
| PID | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| Sample pH | 6 | 5.5 | 8.1 | 7.1 | 8.2 | | | | | | | | | | |
| Matrix | Soil | Soil | Soil | Soil | Soil | | | | | | | | | | |
| SVOCs (mg/kg) | | | | | | | | | | | | | | | |
| Benzo[a]anthracene | 0.0099J | 0.030J | 1.1 1,5,6,9 | 0.021J | 0.055 | 0.9 | 1.1 | 1.8 | NA | 0.9 | 0.9 | NA | 170 | 0.9 | |
| Benzo[a]pyrene | 0.022J | 0.031J | 0.85 1,6,9 | 0.029J | 0.054 | 0.09 | 1.3 | 2.1 | NA | 0.98 | 0.09 | NA | 17 | 0.09 | |
| Benzo[b]fluoranthene | <0.041 | 0.030J | 1.3 1,5,6,9 | 0.030J | 0.069 | 0.9 | 1.5 | 2.1 | NA | 0.9 | 0.9 | NA | 170 | 0.9 | |
| Dibenz[a,h]anthracene | <0.041 | <0.040 | 0.17 1,6,9 | <0.040 | <0.038 | 0.09 | 0.2 | 0.42 | NA | 0.15 | 0.09 | NA | 17 | 0.09 | |
| Naphthalene | <0.041 | 0.030J | 0.052 2 | 0.0082J | 0.034J | 1.8 | 0.04 | 0.2 | NA | NA | 0.17 | NA | 1.8 | 170 | |
| PCBs (mg/kg) | | | | | | | | | | | | | | | |
| PCB-1260 | NA | NA | 0.020J | 0.021 | <0.020 | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Pesticides (mg/kg) | | | | | | | | | | | | | | | |
| Not Analyzed in this sample suite. | | | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Herbicides (mg/kg) | | | | | | | | | | | | | | | |
| Not Analyzed in this sample suite. | | | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | |
| Lead | 22 | 22 | 160 1 | 17 | 110 1 | 107 | NA | NA | NA | NA | NA | NA | 700 | 400 | |
| Manganese | 300 | 640 1,4,7 | 270 | 390 | 300 | 630 | NA | NA | 636 | NA | NA | 630 | 4,100 | 1,600 | |
| TCLP Metals (mg/L) | | | | | | | | | | | | | | | |
| Lead | <0.0075 | <0.0075 | 0.022 10 | <0.0075 | <0.0075 | -- | -- | -- | -- | -- | -- | -- | -- | 0.0075 | |
| Manganese | 0.035 | 0.14 | 0.097 | 0.093 | 0.41 10 | -- | -- | -- | -- | -- | -- | -- | -- | 0.15 | |

Notes:

NA= Not available

ND= Not detected above laboratory reporting limit

NT= Not tested

mg/kg= Milligrams per kilogram

mg/L= Milligrams per liter

TCLP= Toxicity Characteristic Leaching Procedure

SPLP= Synthetic Precipitation Leaching Procedure

MAC= Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (35 Ill. Adm. Code 110. Subpart F).

TACO = Tiered Approach to Corrective Action Objectives

*= Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) is outside acceptance limits.

^= Instrument related QC is outside acceptance limits.

B= Compound was found in the blank and sample.

J= Result is less than the reporting limit but greater than or equal to the method detection limit, concentration reported as an approximate value.

F1= Matrix spike or matrix spike duplicate recovery is outside acceptance limits.

F2= Matrix spike or matrix spike duplicate relative percent difference exceeds control limits.

CCDD = Clean Construction Demolition Debris

Applicable Screening Criteria

¹ Exceeds the most stringent MAC value (35 IAC (1100.605(e))

² Exceeds the Chicago Corporate Limits MAC values

³ Exceeds the Within a Populated Area in a MSA (excluding Chicago) MAC value

⁴ Exceeds the Within a MSA County MAC value

⁵ Exceeds the Within a Populated Area in a non-MSA County MAC value

⁶ Exceeds the Outside a Populated Area MAC value

⁷ Exceeds the Within a non-MSA County MAC value


⁸ Exceeds the Most Stringent TACO Tier 1 Construction Worker Exposure Objective

⁹ Exceeds the Most Stringent TACO Tier 1 Residential Objective

¹⁰ Exceeds the TACO Tier 1 Soil to Groundwater TCLP/SPLP Objective

¹¹ Exceeds the Most Stringent TACO Tier 1 Class 1 Groundwater Objective

| | |
|--|---|
| | Unrestrictive- metals exceed Totals but not TCLP and SPLP; or metals exceed TCLP or SPLP but not both |
| | CCDD Eligible- metals exceed TCLP and SPLP but not Totals |
| | CCDD Eligible- VOCs or SVOCs exceedances; limited CCDD disposal availability |
| | Greater than TACO Construction Worker Exposure Objectives |
| | TACO Tier 1 Criteria; Metals exceed Totals, TCLP, and SPLP; Metals exceed TACO Residential and not considered background; pH outside of |

| | | | |
|-----------------------|---|---|---|
| WORK ORDER 28 | | FIGURE 29 CONTAMINANTS OF CONCERN | |
| DESIGNED <u>XXX</u> |  | 4232 N. BRANDYWINE DR. SUITE A PEORIA, ILLINOIS 61614 PH (309) 692-4422 FX (309) 692-9364 | IDOT JOB #: D-99-037-03 CONTRACT NO.: 98820 DISTRICT 9 FAS 2882 S. Corporate Limit in Benton to Yellow Banks Road |
| DRAWN <u>GAP</u> | | | |
| CHECKED <u>XXX</u> | | | |
| DATE <u>7/17/2017</u> | | | |

Appendix A – PESA

IDOT Sequence #: 19627
IDOT Job #: D99-037-03

ISGS: 3160
IDOT District #: 9

PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

FINAL REPORT

DATE: April 14, 2016

IDOT DESIGN DATE: October 28, 2016

SURVEY TARGET DATE: May 1, 2016

DATE REQUEST RECEIVED: October 28, 2015

LOCATION: FAS 2882 (IL 37), Capital Street to south of Yellow Banks Road, Benton, and Benton, Browning, Denning, and Frankfort Townships, Franklin County; West Frankfort quadrangle (USGS 7.5-minute topographic map), T6S, R2E, Sections 25 and 36; T6S, R3E, Sections 19, 30, and 31; T7S, R2E, Section 1; T7S, R3E, Section 6.

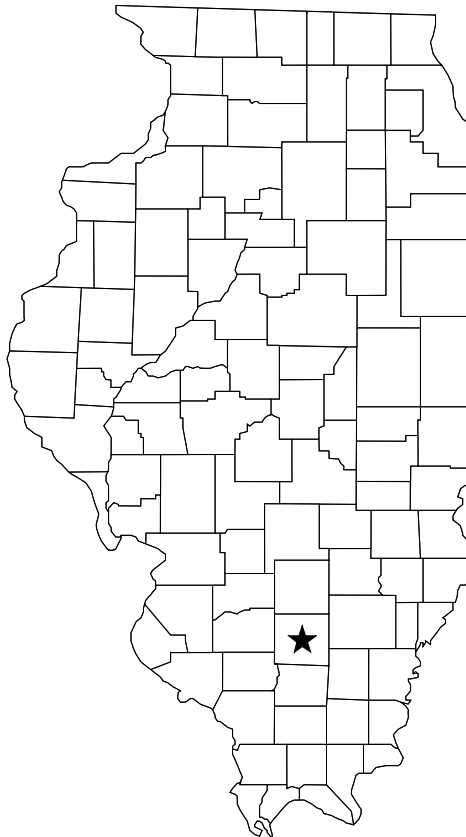


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GLOSSARY OF ACRONYMS

| | | | | | |
|-------------------------|---|---|----------|---|---|
| AAI | - | All Appropriate Inquiries | M.P. | - | mile post |
| ACM | - | asbestos-containing material | MSDS | - | material safety data sheet |
| AST | - | aboveground storage tank | MTBE | - | methyl tertiary butyl ether |
| ASTM | - | American Society for Testing and Materials | NFR | - | No Further Remediation |
| AULs | - | activity and use limitations (includes institutional controls, engineered barriers, and HAAs) | NPL | - | National Priorities List |
| bgs | - | below ground surface | NRCS | - | Natural Resources Conservation Service |
| BOL | - | Bureau of Land (IEPA) | OSFM | - | Office of the State Fire Marshal |
| BTEX | - | benzene, toluene, ethylbenzene, and total xylenes | PAA | - | Permit Access Agreement |
| CDPH | - | Chicago Department of Public Health | PAH/PNA- | - | polynuclear aromatic hydrocarbons |
| CCDD | - | Clean construction and demolition debris | PCB | - | polychlorinated biphenyls |
| CERCLIS- | - | Comprehensive Environmental Response, Compensation, and Liability Information System | PESA | - | Preliminary Environmental Site Assessment |
| CTA | - | Chicago Transit Authority | P.G. | - | Professional Geologist |
| ERNS | - | Emergency Response Notification System | ppb | - | parts per billion (equivalent to $\mu\text{g}/\text{kg}$ for solids, and $\mu\text{g}/\text{l}$ in liquids) |
| FEMA | - | Federal Emergency Management Agency | ppm | - | parts per million (equivalent to mg/kg in solids, and mg/l in liquids) |
| FIRM | - | Flood Insurance Rate map | PRP | - | Potentially Responsible Party |
| FOIA | - | Freedom of Information Act | PSI | - | Preliminary Site Investigation |
| GIS | - | Geographic Information System | RCRA | - | Resource Conservation and Recovery Act |
| GRO | - | Groundwater Remediation Objective | REC | - | recognized environmental condition |
| HAA | - | Highway Authority Agreement | ROW | - | right-of-way |
| IDNR | - | Illinois Department of Natural Resources | SEMS | - | Superfund Enterprise Management System |
| IDOT | - | Illinois Department of Transportation | SIC | - | Standard Industrial Classification |
| IEMA | - | Illinois Emergency Management Agency | SPLP | - | synthetic precipitation leaching procedure |
| IEPA | - | Illinois Environmental Protection Agency | SRO | - | Soil Remediation Objective |
| IMD | - | Illinois Manufacturers Directory | SRP | - | Site Remediation Program |
| ISGS | - | Illinois State Geological Survey | SSTS | - | Section Seven Tracking System (USEPA) |
| ISTC | - | Illinois Sustainable Technology Center (formerly Waste Management and Research Center) | SVOCs | - | semi-volatile organic compounds |
| ISWS | - | Illinois State Water Survey | TACO | - | Tiered Approach to Cleanup Objectives (IEPA) |
| LUST | - | leaking underground storage tank | TCLP | - | toxicity characteristic leaching procedure |
| $\mu\text{g}/\text{kg}$ | - | micrograms per kilogram (ppb) | TPH | - | total petroleum hydrocarbons |
| $\mu\text{g}/\text{l}$ | - | micrograms per liter (ppb) | TRI | - | Toxics Release Inventory |
| mg/kg | - | milligrams per kilogram (ppm) | TVOC | - | Total volatile organic compounds |
| mg/l | - | milligrams per liter (ppm) | UPRR | - | Union Pacific Railroad |
| M.M. | - | mile marker | USDA | - | United States Department of Agriculture |
| | | | USEPA | - | United States Environmental Protection Agency |
| | | | USGS | - | United States Geological Survey |
| | | | UST | - | underground storage tank |
| | | | VOC | - | volatile organic compounds |

EXECUTIVE SUMMARY

This report presents the results of an environmental site assessment for improvements to IL 37 from Capital Street to south of Yellow Banks Road, Benton, and Benton, Browning, Denning, and Frankfort Townships, Franklin County. This report was prepared on behalf of the Illinois Department of Transportation (IDOT) by the Illinois State Geological Survey (ISGS).

The following sites were examined for this project. The tables below list sites along the project for which recognized environmental conditions (RECs)* were identified for each address or address range (Table 1); sites along the project for which only de minimis conditions were identified (Table 2); sites along the project for which no RECs or de minimis conditions were identified (Table 3); and sites adjoining but not on the project that were identified on environmental databases (Table 4). Further investigation of sites with RECs may be desired.

Table 1. The following sites along the project were determined to contain RECs:

| Property name IDOT parcel # | ISGS site # | REC(s), including de minimis conditions | Regulatory database(s) | Land use |
|--|----------------|---|---------------------------|----------------|
| UPRR NA | 3160-5 | Railroad signal boxes | None | Transportation |
| Freeman Environmental Services, Inc. NA | 3160-6 | Former UST; evidence of chemical use; transformers; potential ACM and lead paint | BOL, UST | Commercial |
| J.W. Reynolds Memorial NA | 3160-8 | Potential UST(s); potential former chemical use; potential ACM and lead paint | None | Commercial |
| C.N.C. Guns & Ammo NA | 3160-9 | Potential UST(s); potential former chemical use; transformers; potential ACM and lead paint | None | Commercial |
| Benton Grade School District #47 NA | 3160-10 | Potential UST(s); potential former chemical use; potential ACM and lead paint | None | Educational |
| Masonic & Odd Fellows Cemetery NA | 3160-13 | AST; former dumping; potential ACM and lead paint | BOL | Cemetery |
| Residence NA | 3160-16 | ASTs; natural gas pipeline; potential ACM and lead paint | None | Residential |

| | | | | |
|--|---------|---|------|----------------------------|
| UPRR NA | 3160-21 | Fill; petroleum pipeline; railroad signal box | None | Transportation |
| Vacant land NA | 3160-22 | Petroleum pipeline | None | Vacant |
| Vacant land NA | 3160-23 | Former ASTs; evidence of former chemical use; natural gas pipeline; likely past pesticide and/or herbicide use | None | Vacant |
| Commercial building and residence NA | 3160-25 | Potential UST(s); former ASTs; drums; evidence of former chemical use; solid waste; likely natural gas pipeline; potential ACM and lead paint | BOL | Commercial/ residential |
| Residence NA | 3160-26 | Petroleum pipeline; likely natural gas pipeline; potential ACM and lead paint | None | Residential |
| Vacant land NA | 3160-28 | Potential UST(s); potential former chemical use; natural gas pipeline | None | Vacant |
| Vacant land | 3160-29 | Former ASTs; evidence of former chemical use; likely past pesticide and/or herbicide use | None | Vacant |
| Route 37 Collection Center NA | 3160-32 | Potential UST(s); ASTs; drums; evidence of former chemical use; solid waste; natural gas pipeline; potential ACM and lead paint | None | Commercial |
| Vacant land NA | 3160-33 | Evidence of former chemical use | None | Vacant |
| Vacant land NA | 3160-35 | Evidence of former chemical use | None | Vacant |
| UPRR NA | 3160-36 | Fill | None | Transportation |

| | | | | |
|-------------------------|---------|---|------|----------------|
| Agricultural land NA | 3160-39 | Evidence of former chemical use; likely pesticide and/or herbicide use | None | Agricultural |
| Agricultural land NA | 3160-41 | Evidence of former chemical use; likely pesticide and/or herbicide use | None | Agricultural |
| Residence NA | 3160-45 | Evidence of former chemical use; transformer; natural gas pipeline; potential ACM | None | Residential |
| Vacant land NA | 3160-46 | Evidence of former chemical use | None | Vacant |
| Vacant land NA | 3160-50 | Evidence of former chemical use; former ASTs; likely natural gas pipeline | None | Vacant |
| UPRR NA | 3160-51 | Fill | None | Transportation |
| Agricultural land NA | 3160-52 | Evidence of former chemical use; likely pesticide and/or herbicide use | None | Agricultural |
| Agricultural land NA | 3160-54 | Evidence of former chemical use; likely pesticide and/or herbicide use | None | Agricultural |
| Vacant land NA | 3160-55 | Evidence of former chemical use; natural gas pipeline; likely past pesticide and/or herbicide use | None | Vacant |
| Agricultural land NA | 3160-56 | Evidence of former chemical use; likely natural gas pipeline; likely pesticide and/or herbicide use | None | Agricultural |
| Vacant land NA | 3160-57 | Potential former chemical use | None | Vacant |

| | | | | |
|-----------------|---------|--|------|----------------|
| UPRR NA | 3160-62 | Fill; railroad signal box | None | Transportation |
| Residence NA | 3160-64 | AST; natural gas pipeline; transformer; potential ACM and lead paint | None | Residential |

Table 2. The following sites along the project were determined to contain de minimis conditions only:

| Property name IDOT parcel # | ISGS site # | De minimis condition(s) | Land use |
|---|----------------|--|----------------------------|
| Greater Life Sanctuary NA | 3160-1 | Potential ACM and lead paint | Religious |
| Residence NA | 3160-2 | Potential ACM and lead paint | Residential |
| Commercial building NA | 3160-3 | Transformer; potential ACM and lead paint | Commercial |
| Residences NA | 3160-4 | Potential ACM and lead paint | Residential |
| Roger Clark Veterinary and residence NA | 3160-11 | Potential ACM and lead paint | Commercial/ residential |
| Residence NA | 3160-14 | Potential ACM and lead paint | Residential |
| Agricultural land NA | 3160-15 | Likely pesticide and/or herbicide use | Agricultural |
| Residence NA | 3160-17 | Natural gas pipeline; potential ACM and lead paint | Residential |
| Residence NA | 3160-18 | Potential ACM and lead paint | Residential |
| Vacant land NA | 3160-19 | Natural gas pipeline; likely past pesticide and/or herbicide | Vacant |
| Vacant land NA | 3160-20 | Natural gas pipeline; likely past pesticide and/or herbicide | Vacant |
| Residences NA | 3160-24 | Natural gas pipeline; potential ACM and lead paint | Residential |

| | | | |
|---|---------|---|--------------|
| Agricultural land NA | 3160-27 | Likely natural gas pipeline; likely pesticide and/or herbicide use | Agricultural |
| Vacant land NA | 3160-30 | Likely past pesticide and/or herbicide use | Vacant |
| Pearson's Skating Rink NA | 3160-31 | Likely natural gas pipeline; potential ACM and lead paint | Commercial |
| Vacant land NA | 3160-37 | Natural gas pipeline; likely past pesticide and/or herbicide use | Vacant |
| Agricultural land NA | 3160-38 | Natural gas pipeline; likely pesticide and/or herbicide use | Agricultural |
| Vacant land NA | 3160-40 | Likely past pesticide and/or herbicide use | Vacant |
| Middle Fork Big Muddy River tributary NA | 3160-42 | Likely natural gas pipeline | Stream |
| Vacant land NA | 3160-43 | Likely natural gas pipeline; likely past pesticide and/or herbicide use | Vacant |
| Vacant land NA | 3160-44 | Likely past pesticide and/or herbicide use | Vacant |
| Residence NA | 3160-47 | Likely natural gas pipeline; potential ACM | Residential |
| Vacant land NA | 3160-48 | Likely past pesticide and/or herbicide use | Vacant |
| Agricultural land NA | 3160-49 | Natural gas pipeline; likely pesticide and/or herbicide use | Agricultural |
| Vacant land NA | 3160-53 | Likely natural gas pipeline; likely past pesticide and/or herbicide use | Vacant |
| Vacant land NA | 3160-59 | Natural gas pipeline; likely past pesticide and/or herbicide use | Vacant |
| Middle Fork Big Muddy River tributary NA | 3160-60 | Likely natural gas pipeline | Stream |
| Agricultural land NA | 3160-61 | Natural gas pipeline; likely pesticide and/or herbicide use | Agricultural |
| Vacant land NA | 3160-63 | Likely past pesticide and/or herbicide use | Vacant |

| | | | |
|-------------------|---------|---|--------|
| Vacant land NA | 3160-65 | Likely past pesticide and/or herbicide use | Vacant |
|-------------------|---------|---|--------|

Table 3. The following sites along the project were determined not to contain RECs or de minimis conditions:

| Property name IDOT parcel # | ISGS site # | Land use |
|--------------------------------|----------------|----------|
| Vacant land NA | 3160-7 | Vacant |
| Vacant land NA | 3160-12 | Vacant |
| Vacant land NA | 3160-34 | Vacant |
| Vacant land NA | 3160-58 | Vacant |

Table 4. The following additional sites, adjoining but not on the project, were identified on environmental databases:

| Property name | ISGS site # | Regulatory database(s) | Land use |
|-----------------|----------------|---------------------------|-------------|
| Amanda Barnhart | 3160-A | BOL | Residential |

* For all sites:

Where REC(s) are indicated as present, a condition was noted that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the site, as discussed in the text. Potential hazards were not verified by ISGS testing. Radon, biological hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may also be of concern. No further investigation concerning the presence or use of these factors was conducted for this PESA.

Where RECs are not indicated as present, radon, biological hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may still be of concern. No further investigation concerning the presence or use of these factors was conducted for this PESA.

For the purposes of this report, the following are considered to be de minimis conditions:

- Normal use of lead-based paint on exteriors and interiors of buildings and structures.
- Use of asbestos-containing materials in building construction.
- Transformers in normal use, unless the transformers were observed to be leaking, appear

on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use.

- Agricultural use of pesticides and herbicides. In addition, most land in Illinois was under agricultural use prior to its conversion to residential, industrial, or commercial development. Pesticides, both regulated and otherwise, may have been used throughout the project area at any time. Unless specifically discussed elsewhere in this report, no information regarding past pesticide use that would be subject to enforcement action was located for this project, and such use is considered a de minimis condition.

The following data gaps exist for all PESAs:

- For residences, only areas visible from public roads are inspected.
- Interiors of buildings are not inspected.
- Interiors of agricultural areas are not inspected during growing seasons.

Radon and biological hazards are not considered in this PESA unless specifically noted.

NA = No parcel number was supplied by IDOT for this site.

Although potential natural hazards and undermining, if present, are described in this report, they are not considered as RECs or de minimis conditions for the purposes of this report, and are therefore not listed in the tables above.

INTRODUCTION

This is the **Final Report** of a preliminary environmental assessment by the ISGS of natural and man-made hazards that may be encountered for improvements to IL 37 from Capital Street to south of Yellow Banks Road, Benton, and Benton, Browning, Denning, and Frankfort Townships, Franklin County (Attachment 1). The acquisition of additional ROW or easement, in-stream work, and excavation or subsurface utility relocation are anticipated for this project. No railroad ROW involvement is expected. Stationing information was provided by IDOT in feet, and is presented as such in this report. IL 37 stationing north of Wastena Street in Benton had a different stationing system than stationing along the rest of IL 37 in the project area. Stationing where present and legible is given to the approximate mid-point of the site or as ranges where appropriate. This report identifies and evaluates recognized environmental conditions (RECs) that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the proposed project.

This assessment has been prepared using historical and geological information including aerial photographs, U.S. Geological Survey topographic maps, plat maps, file information of the ISGS regulatory file information from federal, state, and other agencies, and various other sources of information. An on-site investigation has been completed. The specific methods used to conduct the assessment are contained in "A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects" (Erdmann et al., 2014). If new information is received concerning this project that is considered to have a significant impact on the findings of this report, the report will be revised and resubmitted to IDOT Bureau of Design and Environment.

This Preliminary Environmental Site Assessment (PESA) was performed in compliance with the IDOT-ISGS PESA Manual (Erdmann et al., 2014) and not with the All Appropriate Inquiries environmental assessment standard (40 CFR Part 312) that took effect on November 1, 2006, or with the ASTM standard E1527-05 or E1527-13.

GEOLOGY

Bedrock geology. The topmost bedrock unit in all but the south edge of the project area consists of Pennsylvanian-age rocks of the Bond Formation. This formation primarily consists of limestones, sandstones, and coals. The south edge of the project area is underlain by Pennsylvanian-age rocks of the Shelburn-Patoka Formation. This formation consists primarily of shales, limestones, and coals.

Surficial geology. The total thickness of surficial deposits has been mapped as 8 to 15 m (25 to 50 ft) in the north and south ends of the project area. The total thickness of surficial deposits in the central portion of the project area has been mapped as less than 6 m (20 ft). Throughout the project area, these deposits consist of less than 6 m (20 ft) of loamy and sandy glacial deposits of the Glasford Formation overlying bedrock.

Soils. Along the project ROW, the NRCS has classified the Bonnie silt loam, 0 to 2% slopes, frequently flooded, Cisne silt loam, bench, 0 to 2% slopes, and Wynoose silt loam, bench, 0 to 2% slopes as containing 33 to 100% hydric components. None of the other soils in the project area have been classified by NRCS as containing more than 33% hydric components. The

NRCS has classified the Hickory-Kell silt loams, 18 to 35% slopes, and Orthents, loamy, undulating, Plumfield silty clay loam, 5 to 18% slopes as non-prime farmland.

Coal mining. Illinois Coal Mine Maps of Franklin County indicate that coal mining has taken place throughout the entire project area. This map and ISGS Online Coal Maps of West Frankfort Quadrangle indicate that two former mines, Benton #1 and Orient #2, underlie the project area.

The Benton #1 mine underlies the northern portion of the project area. This mine operated from 1905 to 1924; it was last operated by the Chicago, Wilmington and Franklin Coal Company. This mine worked the Herrin coal seam by the room-and-pillar-panel method. Depth of the coal ranged from 188 to 190 m (618 to 624 ft).

The Orient #2 mine underlies the central and southern portions of the project area. This mine operated from 1922 to 1960; it was last operated by the Orient Number Two Coal Company. This mine worked the Herrin coal seam by a modified room-and-pillar method. Depth of the coal ranged from 146 to 150 m (480 to 500 ft).

No shafts were identified within 0.4 kilometers (0.25 miles) of the project ROW for these mines. The entire project area is undermined by some form of the room-and-pillar method, and therefore may be subject to subsidence.

HYDROGEOLOGY

Due to project type or IDOT internal procedure, the sections on surficial public water supplies, groundwater recharge, groundwater protection areas, potential for contamination of shallow aquifers, and well log information are not included in this report.

Drainage direction. Surficial drainage in the project area is generally to the southeast, in the direction of Middle Fork Big Muddy River. Two unnamed tributaries of Middle Fork Big Muddy River (Site 3160-42 and 3160-60) cross the project area and generally flow to the southeast. However, since drainage ditches and a few storm sewers are present, most surficial runoff will be controlled by the ditch and sewer system; such systems typically are designed to follow natural drainage patterns.

Neither the near-surface nor the shallow unconfined groundwater flow direction was specifically determined for this project, but they generally mimic local topography.

NATURAL FEATURES AND HAZARDS

Wetlands. According to National Wetlands Inventory maps, one palustrine wetland has been mapped in each of the following sites:

- Site 3160-22
- Site 3160-26
- Site 3160-38
- Site 3160-58

- Site 3160-59
- Site 3160-60

These wetland maps were defined primarily by aerial photographs, which may reflect conditions specific to the year or season that the photography was completed. Therefore, wetland areas may be either overstated or missing entirely.

Seismic risk. According to the U.S. Geological Survey, the project is located in an area where the peak horizontal ground accelerations on bedrock (expressed as a percentage of the gravitational acceleration, g) that have a 2% probability of being exceeded in 50 years are between 20% and 80% g. These accelerations are from the USGS 2014 national seismic hazard maps that incorporate the earthquake magnitudes and rates of return from historical events and expected maximum magnitudes from all known fault zones and background events for the general geologic setting. These accelerations on bedrock may be modified by the soils and be greater on the ground surface.

No other observed or known natural hazards were identified for this project.

PROJECT SITES

The project area is primarily under commercial, residential, and agricultural use. Sites will be described from north to south along IL 37 below. Attachment 1 contains a project location map. Attachment 2 contains maps of all sites discussed in this report. The versions of the OSFM's UST database, IEPA's LUST database, IEPA's Bureau of Land database, and USEPA's SEMS database utilized for this report were dated April 8, 2016, April 4, 2016, April 8, 2016, and April 8, 2016, respectively. OSFM files were received on January 5, 2016. IEPA files were received on January 11, 2016. No USEPA files were reviewed for this project. Fieldwork for this project was conducted on February 3 and 17, 2016.

This project intersects previous ISGS PESAs and PSI as follows:

| ISGS PESA # | Date submitted to IDOT | Intersects | PSI |
|-------------|------------------------|--|---|
| 1497 | March 15, 2004 | Along IL 37 from Capital Street to Yellow Banks Road | None |
| 2651 | January 16, 2013 | At intersection with Yellow Banks Road | Ecology & Environmental #7, work order #054 |

Information from these earlier PESAs will be summarized in geographic order below. No sites in this project were covered in PSI Ecology & Environmental #7, work order #054.

Data gaps applicable to the entire project area

The following data gaps applicable to the entire project area were noted for this project. Data gaps specific to individual sites are discussed in the site writeups below.

- Sanborn map coverage varied in the city of Benton portion of the project area. No Sanborn map coverage was found unless otherwise noted in the site discussion.
- Aerial photographs provided information only for those specific times covered by the photographs, as noted in the Information Sources section. No records were available for intervening years, and other land uses could have occurred in these years.

This project occurs within a crude oil extraction area that has been active since about 1941. The current distribution of active pumping wells, tank batteries, and known pipelines and collection lines is likely only a small fraction of those historically present. In addition, the entire area is likely to be underlain by numerous active and abandoned crude oil collection lines. For the most part, the locations of these lines are not mapped, and are generally known only to those who put them there. They could also be made of steel or plastic and are typically shallowly buried. Also, most wellhead pumps in this area are currently powered by electricity or propane, but this was not always the case. In the past, some pumps were run on gasoline or diesel fuel. Because of the nature of these potential hazards, not all potential hazards related to the oil industry in this area could be located as part of this preliminary assessment by ISGS.

Site 3160-1. Greater Life Sanctuary, 1208 S. Main Street, Benton (northeast corner of IL 37 and Capital Street; approximate station 44+00 LT [north of Wastena Street]; Attachment 2, page 1). This site is occupied by a church and an outbuilding. This site did not appear on any of the regulatory lists checked for this project.

The 1900 plat map depicted this site under individual ownership. The 1917 and later plat maps depicted this site as part of undifferentiated Benton. The 1938 through 1965 aerial photographs depicted vacant grassy land. The 1947 and 1957 Sanborn maps depicted a vacant lot. On the 1971 and later aerial photographs, the site had its current configuration. In the 1921 through 1965 city directories, no listings were found for this address. In the 1970 through 2014 city directories, a church was listed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-2. Residence, 1209 S. Main Street, Benton (northwest corner of IL 37 and Capital Street; approximate station 44+50 RT [north of Wastena Street]; Attachment 2, page 1). This site is occupied by a residence and an outbuilding. This site did not appear on any of the regulatory lists checked for this project.

The 1900 plat map depicted this site under individual ownership. The 1917 and later plat maps depicted this site as part of undifferentiated Benton. On the 1938 and later aerial photographs, and on the 1947 and 1957 Sanborn maps, the current residence was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs and Sanborn maps indicates that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-3 (1497-C). Commercial building, 1301 S. Main Street, Benton (southwest corner of IL 37 and Capital Street; approximate station 46+70 RT [north of Wastena Street]; Attachment 2, page 1). This site is occupied by a vacant commercial building. A pole-mounted transformer was observed on the northeast corner of the site. This site did not appear on any of the regulatory lists checked for this project.

The 1900 plat map depicted this site under individual ownership. The 1917 through 1940 plat maps depicted this site as part of undifferentiated Benton with a railroad along the south edge of the site. The 1938 aerial photograph depicted the eastern portion of the current building; vacant grassy land was depicted across the rest of the site. The use of the commercial building could not be determined from this aerial. The 1947 and 1957 Sanborn maps depicted the current building occupied by a building supply company. On the 1952 and later aerial photographs, the current building was depicted. The 1964 and later plat maps depicted this site as part of undifferentiated Benton. In the 1921 through 1923 city directories, no listings were found for this address. In the 1948 through 2005 city directories, a building supply company was listed. In the 2010 and 2014 city directories, this address was listed as a residence. According to a local resident, from the late 2000s to about 2014, this building was occupied by a commercial storage business and a residence.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or

underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The use of the commercial building depicted on the 1938 aerial photograph is unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3160-4. Residences, 102-202 E. Capital Street, Benton (southeast corner of IL 37 and Capital Street; approximate station 46+50 LT [north of Wastena Street]; Attachment 2, page 1). This site is occupied by two residences. This site did not appear on any of the regulatory lists checked for this project.

The 1900 plat map depicted this site under individual ownership. The 1917 through 1940 plat maps depicted this site as part of undifferentiated Benton with a railroad along the south edge of the site. The 1964 and later plat maps depicted this site as part of undifferentiated Benton. The 1938 and 1952 aerial photographs, and the 1947 and 1957 Sanborn maps, depicted three different residences on the site. The 1959 through 1998 aerial photographs depicted the current residence on the east half of the site and a different residence on the west half of the site. On the 2005 and later aerial photographs, the site had its current configuration.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs and Sanborn maps indicates that one of these residences was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in at least one of these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-5. UPRR, 1400 block of S. Main Street, Benton (east of IL 37 between Capital Street and Minier Road; approximate station 0+00 to 20+50 LT; Attachment 2, page 1). This site is occupied by a railroad and its adjoining ROW. Two railroad signal boxes were observed along the west side of the railroad. One of these boxes was observed just north of Wastena Street. The second box was observed just east of Oddfellow Lane. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, a railroad was present at this site. The date of earliest development is unknown. The 1925 through 1957 Sanborn maps and the 1938 and later aerial photographs depicted a railroad.

Potential hazards associated with railroad signal boxes include batteries and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The date of earliest development is unknown.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Railroad signal boxes.

No de minimis conditions were identified at this site.

Site 3160-6. Freeman Environmental Services, Inc., 307 E. Capital Street, Benton (northeast corner of Wastena Street and UPRR; approximate station 18+50 LT [Wastena Street]; Attachment 2, page 1). This site is occupied by an environmental consulting business. The site consisted of two buildings. The east building included offices and a warehouse. The west building was an equipment shelter. A pole-mounted transformer was observed on the southeast corner of the site. Several small pole-mounted transformers were observed centered along the south edge of the site.

The 1900 and 1917 plat maps depicted this site under individual ownership. The 1918 and later plat maps depicted this site as part of undifferentiated Benton. The 1938 through 1971 aerial photographs depicted agricultural use. The 1980 through 1998 aerial photographs depicted the current east building. On the 2005 and later aerial photographs, the site had its current configuration. In the 1921 through 1980 city directories, no listings were found for this address. The 1985 through 1995 city directories listed a warehouse. In the 2001 through 2014 city directories, no listings were found for this address. In 2004 through 2010, IEPA files indicated this was a warehouse. According to a local resident, the current business has occupied this site since about

2013.

Under the name “Benton Storeroom” and the address “E. Watsina [sic] St Rr 1” in Benton, this site appears on the UST list (OSFM #7021521) with one registered UST. According to OSFM files, one diesel UST was removed in 1989. OSFM files contained no information concerning the location of this former UST. Mr. Shane Cockrum, Chief, Benton Fire Department, had no information regarding this former UST location. The location of the former UST listed in OSFM records is unknown.

Under the name “Ameren Illinois-Formerly” and the address “301 Wastena” in Benton, this site appears on the BOL list (IEPA #0550055064). According to IEPA files, in 2004 through 2009, Ameren Benton Storeroom filed Illinois Nonhazardous Special Waste Annual Reports that indicated no nonhazardous special waste was shipped from this facility. In 2010, Ameren Benton Storeroom filed an Illinois Nonhazardous Special Waste Annual Report stating that 624 L (165 gal) of waste containing used oil was shipped from this facility. No further information was available in IEPA files regarding IEPA #0550055064.

Under the name “Freeman Enviro Services Inc” and the address “307 Wastena St” in Benton, this site appears on the BOL list (IEPA #0550055089). According to IEPA files, in March 2014, IEPA issued an inventory number to Freeman Enviro Services Inc. No further information was available in IEPA files regarding IEPA #0550055089.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The location of the former UST listed in OSFM records is unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in these buildings.

The following RECs were identified at this site: Former UST; evidence of chemical use.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3160-7. Vacant land, 300 block of Wastena Street, Benton (southeast corner of Wastena Street and UPRR; approximate station 14+50 RT [Wastena Street]; Attachment 2, page 1). This site is occupied by vacant grassy land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, vacant grassy land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs or de minimis conditions were identified at this site.

Site 3160-8 (1497-12). J.W. Reynolds Memorial, 1410 S. Main Street, Benton (southeast corner of IL 37 and Wastena Street; approximate station 1+50 LT; Attachment 2, page 1). This site is occupied by a cemetery monument sales business. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1925 Sanborn map depicted a store and residence in a shared building centered along the west edge of the site. The 1938 through 1965 aerial photographs depicted two different commercial buildings. These aerials depicted one of the buildings along the north edge of the current parking lot and the second building along the south edge of the current building. The 1947 and 1957 Sanborn maps depicted an electric motor repair shop on the north edge of the current parking lot and a store along the south edge of the current building. The 1971 through 2010 aerial photographs depicted the same south building, a parking lot west of the building, and vacant grassy land across the rest of the site. On the 2011 and later aerial photographs, the site had its current configuration. In the 1921 through 1923 city directories, no listings were found for this address. The 1948 city directory listed an electric motor repair shop and a monument sales business. The 1951 through 1964 city directories listed an auto repair shop and a monument sales business. In the 1970 and later city directories, the current occupant was listed.

In two boreholes completed at this site for ISGS #1497 in 2004, no VOCs were detected. See ISGS #1497 for details.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); potential former chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-9 (1497-13). C.N.C. Guns & Ammo, 1401 S. Main Street, Benton (southwest corner of IL 37 and Wastena Street; approximate station 00+80 RT; Attachment 2, page 1). This site is occupied by a retail gun store. Three pole-mounted transformers were observed centered along the east edge of the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. The 1952 aerial photograph depicted a circular-shaped commercial building near the center of the site. The 1959 through 2005 aerial photographs depicted this same building with additions to its north, south, and west sides and a residence along the west edge of the site. On the 2006 and later aerial photographs, the site had its current configuration. In the 1921 through 1923 city directories, no listings were found for this address. The 1948 through 1995 city directories listed a restaurant. In the 2001 and 2005 city directories, this address was not listed. In the 2010 and later city directories, the current occupant was listed. According to a 2004 interview completed for ISGS #1497, this site was previously a gasoline station. The interviewed local resident could not recall the dates of operation of the station. During fieldwork for ISGS #1497, a vacant commercial building was present near the center of the site.

Mr. Shane Cockrum, Chief, Benton Fire Department, had no information regarding USTs at this site. Mr. Porter, the site owner, was not aware of any past or present USTs on the site. The status and location of the UST(s) associated with the former gasoline station are unknown.

In two boreholes completed at this site for ISGS #1497 in 2004, no VOCs were detected. See ISGS #1497 for details.

Historic gas stations commonly conducted vehicle repair on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

The following data gap was identified at this site:

- The status and location of any undocumented UST(s) at this site are unknown.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); potential former chemical use.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3160-10 (1497-14). Benton Grade School District #47, 1403 S. Main Street, Benton (southwest quadrant of IL 37 and Wastena Street; approximate station 3+50 RT; Attachment 2, page 1). This site is occupied by a school district office. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1925 Sanborn map depicted a gasoline station, two gasoline USTs, and an oil warehouse. This Sanborn map depicted the oil warehouse on the northwest corner of the site. This map depicted the northern UST approximately 46 m (150 ft) north of the UPRR and Oddfellow Lane intersection and 15 m (50 ft) west of the IL 37 centerline. This map depicted the southern UST approximately 33 m (110 ft) north of the UPRR and Oddfellow Lane intersection and 14 m (45 ft) northwest of the IL 37 centerline. The 1938 through 1952 aerial photographs depicted the same gasoline station building, an apparent dispenser island southeast of the station building, and a circular-shaped building south of the station building. The 1947 and 1957 Sanborn maps depicted this circular-shaped building as a store, and the same gasoline station and USTs. The 1959 through 1980 aerial photographs depicted the same gasoline station building and apparent dispenser island surrounded by a parking lot. The 1988 and later aerial photographs, depicted the current building and parking lot. In the 1921 through 1923 city directories, no listings were found for this address. The 1948 through 1970 city directories listed a gasoline station. The 1975 and 1980 city directories did not list this address. The 1985 through 2010 city directories listed an electric utility company office. In the 2014 and later city directories, the current occupant was listed.

Mr. Shane Cockrum, Chief, Benton Fire Department, did not know the status of the USTs associated with the former gasoline station. During the interview with Chief Cockrum, he contacted the city's attorney who managed the purchase of this site; the attorney had no information regarding the status of the USTs associated with the former gasoline station. The status of the USTs depicted on the 1925, 1947, and 1957 Sanborn maps and any other potential former UST(s) at this site are unknown.

In three boreholes completed at this site for ISGS #1497 in 2004, VOCs were detected in all three boreholes. See ISGS #1497 for details.

Historic gas stations commonly conducted vehicle repair on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s). Potential hazards associated with oil warehouses include lubricants, oils, VOCs, and SVOCs.

The following data gaps were identified at this site:

- The status of the USTs depicted on the 1925, 1947, and 1957 Sanborn maps is unknown.
- The status and location of any undocumented UST(s) at this site are unknown.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); potential former chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-11. Roger Clark Veterinary and residence, 12733 Oddfellow Lane, Benton (southeast corner of UPRR and Oddfellow Lane; approximate station 3+00 LT; Attachment 2, page 1). This site is occupied by a veterinary clinic and a residence with the same address. The site consisted of a residence and two commercial buildings. The residence was on the south half of the site and the two veterinary clinic buildings were on the north half of the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 and 1971 aerial photographs depicted a different residence. The 1980 through 1998 aerial photographs depicted the same residence and the current southern commercial building. The 2005 through 2010 aerial photographs depicted the same residence and the current commercial buildings. On the 2011 and later aerial photographs, the site had its current configuration. In the 1921 through 1995 city directories, no listings were found for this address. In the 2001 and later city directories, the current occupants were listed. Since the late 1970s, according to a local resident, a veterinary clinic and residence have occupied this site.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or

stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-12. Vacant land, 12700 block of Oddfellow Lane, Benton (southeast quadrant of UPRR and Oddfellow Lane; approximate station 9+00 LT; Attachment 2, page 1). This site is occupied by vacant grassy land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, vacant grassy land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs or de minimis conditions were identified at this site.

Site 3160-13. Masonic & Odd Fellows Cemetery, 12740 Oddfellow Lane, Benton (southwest corner and southeast quadrant of UPRR and Oddfellow Lane; approximate station 0+00 to 18+50 LT; Attachment 2, page 1). This site is occupied by a cemetery. The site consisted of two buildings on the northwest corner of the site and burial plots across the rest of the site. The cemetery office was in the northern building and equipment storage was in the southern building. An AST of unknown contents was observed along the east side of the southern building.

The 1900 and 1917 plat maps depicted this site under individual ownership. On the 1918 and later plat maps, this site was depicted as a cemetery. The 1938 and 1952 aerial photographs depicted most of the current cemetery and vacant grassy land on the northeast corner of the site. On the 1959 and later aerial photographs, the current cemetery and buildings were depicted. The 1921 through 1951 city directories did not list this address. In the 1955 and later city directories, the current occupant was listed.

Under the name "Masonic-Odd Fellows Cemetery" and the address "12740 Oddfellows Ln" in Benton, this site appears on the BOL list (IEPA #0550055086). According to IEPA files, in August 2012 IEPA personnel completed an inspection due to a complaint of dumping. During this inspection, dumped material was observed on the southeast corner of the site. The dumped material consisted of graveside decorations. In November 2012, during a follow-up inspection, no

violations were observed and the site had returned to compliance. No further information was available in IEPA files regarding IEPA #0550055086. During fieldwork for this project, no evidence of dumping was observed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The contents of the AST are unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in these buildings.

The following RECs were identified at this site: AST; former dumping.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-14. Residence, 1411 S. Main Street, Benton (west side of IL 37 between Wastena Street and Park Road; approximate station 6+50 RT; Attachment 2, page 1). This site is occupied by a residence and an outbuilding. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. On the 1952 and later aerial photographs, the current residence was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-15. Agricultural land, 1400 block of S. Main Street, Benton (northwest corner of IL 37 and Park Road; approximate station 8+50 RT; Attachment 2, page 1). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, agricultural use was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-16. Residence, 12524 S. Park Road, Benton Township (southwest corner of IL 37 and Park Road; approximate station 12+50 RT; Attachment 2, page 1). This site is occupied by a residence and two outbuildings. Two ASTs of unknown contents were observed along the west side of the western outbuilding. A natural gas pipeline marker was observed on the northwest corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1959 aerial photographs depicted a different residence. The 1965 and 1971 aerial photographs depicted vacant grassy land with some trees. On the 1980 and later aerial photographs, the site had its current configuration.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The contents of the ASTs are unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence may have been constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

The following REC was identified at this site: ASTs.

The following de minimis conditions were identified at this site: Natural gas pipeline; potential ACM and lead paint.

Site 3160-17. Residence, 8046 Minier Road, Benton Township (southwest quadrant of IL 37 and Park Road; approximate station 17+50 RT; Attachment 2, page 1). This site is occupied by a residence. Two natural gas pipeline markers were observed along the west edge of the site. Based on the pipeline markers observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1971 aerial photographs depicted vacant grassy land. On the 1980 and later aerial photographs, the current residence was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence may have been constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; potential ACM and lead paint.

Site 3160-18. Residence, 7968 Minier Road, Benton Township (southeast quadrant of IL 37 and Minier Road; approximate station 19+50 RT; Attachment 2, page 1). This site is occupied by a residence and two outbuildings. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, the current residence was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicate that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3160-19. Vacant land, 7000 block of IL 37, Benton Township (northwest corner of IL 37 and Minier Road; approximate station 20+00 RT; Attachment 2, page 2). This site is occupied by vacant grassy land. A natural gas pipeline marker was observed on the southeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented northeast-southwest. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. On the 1952 and later aerial photographs, vacant grassy land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-20. Vacant land, 7000 block of IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 21+50 RT; Attachment 2, page 2). This site is occupied by vacant wooded land. A natural gas pipeline marker was observed centered along

the east edge of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented northeast-southwest. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. On the 1952 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-21 (1497-15 [partial]). UPRR, 7000 block of IL 37, Benton Township (northeast corner of IL 37 and Andrews Road; approximate station 20+50 to 49+50 LT; Attachment 2, page 1). This site is occupied by a railroad and its adjoining ROW. The railroad grade in the southern third of the site was elevated above the surrounding ground. The composition of the fill material used to elevate the southern third of the railroad grade is unknown. A petroleum pipeline marker and vent pipe were observed centered along the west edge of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented east-west. A railroad signal box was observed along the north side of the railroad and west of Minier Road. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, a railroad was present at this site. The date of earliest development is unknown. On the 1938 and later aerial photographs, a railroad was depicted.

In one borehole completed at this site for ISGS #1497 in 2004, no VOCs were detected. See ISGS #1497 for details.

Potential hazards associated with railroad signal boxes include batteries and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, storage tanks (above or underground), pumps or dispensers, drums, monitoring wells, solid waste, transformers, non-

petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- The composition of the fill material used to elevate the southern third of the railroad grade is unknown.
- The date of earliest development is unknown.

Because there are no buildings present and no evidence of fill containing demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Fill of unknown composition; petroleum pipeline; railroad signal box.

No de minimis conditions were identified at this site.

Site 3160-22. Vacant land, 7000 block of Minier Road, Benton Township (southwest corner of UPRR and Minier Road; approximate station east of 21+00 to 34+00 LT; Attachment 2, page 2). This site is occupied by vacant wooded land. A petroleum pipeline marker was observed on the southwest corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented east-west. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Petroleum pipeline.

No de minimis conditions were identified at this site.

Site 3160-23. Vacant land, 7000 block of IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 23+50 RT; Attachment 2, page 2). This site

is occupied by vacant wooded land. A natural gas pipeline marker was observed on the southeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented northeast-southwest. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1944, an oil well was completed at this site. The 1952 through 1993 aerial photographs depicted an oil well and a tank battery consisting of two ASTs. On the 1998 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Former ASTs; evidence of former chemical use.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-24. Residences, 7843-7871 IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 24+00 to 31+00 RT; Attachment 2, page 2).

This site is occupied by two residences and three outbuildings. A natural gas pipeline marker was observed on the southeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented northeast-southwest. A propane AST was observed along the north side of the northern residence. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. On the 1952 and later aerial photographs, the current residences were depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that these residences were constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; potential ACM and lead paint.

Site 3160-25. Commercial building and residence, 7837 IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 32+00 RT; Attachment 2, page 2). This site is occupied by a vacant commercial building and a residence with the same address. The vacant commercial building and its associated parking lot were on the west half of the site and the residence was on the east half of the site. Two auto bays observed on the south side of this commercial building indicated it may have previously been used as an auto repair shop. Four metal drums of unknown contents were observed at the southeast corner of the commercial building. About 12 scrap tires were observed near the southwest corner of the commercial building. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-24 and Site 3160-28, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented northeast-southwest.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, an oil well (designated as 25a on Attachment 2, page 2) was completed at this site. The 1952 through 1980 aerial photographs depicted the same oil well, a tank battery consisting of two ASTs in the northwest corner of the site, and agricultural use on the rest of the site. On the 1988 and later aerial photographs, the site had its current configuration. The 1921 through 1995 city directories did not list this address. The 2001 through 2010 city directories listed a trucking company. On the 2014 and later city directories, this address was not listed.

Under the name “Jim Conner Enterprises” and the address “7837 Rte 37” in Benton, this site appears on the BOL list (IEPA #0558015004). According to IEPA files, in February 2004, IEPA issued an inventory number to Jim Conner Enterprises. No further information was available in IEPA files regarding IEPA #0558015004.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s). Potential hazards associated with oil wells and tank batteries include ASTs, VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or

underground), pumps or dispensers, protruding pipes, monitoring wells, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- The contents of the drums are unknown.
- No natural gas pipelines markers were observed at this site. However, natural gas pipeline markers were observed elsewhere throughout the project along the west side of IL 37 between Minier Road and the south project limit, and it is likely that a natural gas pipeline passes through this site as well.
- The status and location of any undocumented UST(s) at this site are unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in these buildings.

The following RECs were identified at this site: Potential UST(s); former ASTs; drums; evidence of former chemical use.

The following de minimis conditions were identified at this site: Solid waste; likely natural gas pipeline; potential ACM and lead paint.

Site 3160-26 (1497-15 [partial]). Residence, 7789 IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 34+00 RT; Attachment 2, page 2).

This site is occupied by a residence and two outbuildings. A petroleum pipeline marker and vent pipe were observed on the southeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this petroleum pipeline is likely oriented east-west. A propane AST was observed along the west side of the residence. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-24 and Site 3160-28, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented northeast-southwest. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1971 aerial photographs depicted vacant grassy land. On the 1980 and later aerial photographs, the current residence was depicted.

In one borehole completed at this site for ISGS #1497 in 2004, no VOCs were detected. See ISGS #1497 for details.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or

unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipelines markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-24 and Site 3160-28, and it is likely that a natural gas pipeline passes through this site as well.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence may have been constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

The following REC was identified at this site: Petroleum pipeline.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; potential ACM and lead paint.

Site 3160-27. Agricultural land, 7000 block of IL 37, Benton Township (east and west sides of IL 37 between Minier and Andrews Roads; approximate station 42+50 RT and east of 35+50 LT; Attachment 2, page 2). This site is occupied by agricultural land. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-28 and Site 3160-32, and it is likely that a natural gas pipeline passes through the portion of this site west of IL 37 as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, agricultural use was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipelines markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-28 and Site 3160-32, and it is likely that a natural gas pipeline passes through the portion of this site west of IL 37 as well.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-28. Vacant land, 7745 IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 37+50 RT; Attachment 2, page 2). This site is occupied by vacant grassy land. The address for this site was obtained through an internet search of a former business name which was provided by the Benton Fire Chief. This fenced site consisted of the foundations of two former buildings on the north half of the site, a billboard on the southeast corner of the site, and a pile of scrap metal on the southwest corner of the site. A natural gas pipeline marker was observed on the northeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 2009 aerial photographs depicted two commercial buildings on the north half of the site and parking on the rest of the site. In the 1921 and later city directories, this address was not listed. According to Mr. Shane Cockrum, Chief, Benton Fire Department, the previous occupants of this site included a construction company followed by a towing and auto repair service. He indicated the site had been vacant since about 2010. On the 2010 and later aerial photographs, vacant grassy land with the two current foundations was depicted.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s). No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The status and location of any undocumented UST(s) at this site are unknown.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Potential UST(s); potential former chemical use.

The following de minimis condition was identified at this site: Natural gas pipeline.

Site 3160-29. Vacant land, 7000 block of IL 37, Benton Township (east of IL 37 between Minier and Andrews Roads; approximate station east of 38+00 LT; Attachment 2, page 2). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1943, an oil well was completed at this site. The 1952 through 1988 aerial photographs depicted an oil well and a tank battery consisting of two ASTs. On the 1993 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill containing demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Former ASTs; evidence of former chemical use.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-30. Vacant land, 7000 block of IL 37, Benton Township (east of IL 37 between Minier and Andrews Roads; approximate station east of 41+00 LT; Attachment 2, page 2).

This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. On the 1952 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-31. Pearson's Skating Rink, 7697 IL 37, Benton Township (west side of IL 37 between Minier and Andrews Roads; approximate station 40+50 RT; Attachment 2, page 2).

This site is occupied by a roller skating rink. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-28 and Site 3160-32, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. The 1952 through 1971 aerial photographs depicted vacant grassy land. On the 1980 and later aerial photographs, the site had its current configuration. In the 1921 and later city directories, this address was not listed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipelines markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-28 and Site 3160-32, and it is likely that a natural gas pipeline passes through this site as well.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; potential ACM and lead paint.

Site 3160-32. Route 37 Collection Center, 7533 IL 37, Browning Township (northwest corner of IL 37 and Andrews Road; approximate station 43+00 to 49+00 RT; Attachment 2, page 2).

This site is occupied by a commercial building containing a recycling business. Recyclable materials, including automobiles and scrap metal, were stockpiled to the west and northwest of the building. According to a site employee, motors, radiators, gas tanks, batteries, and tires are removed from the vehicles before they arrive. Two ASTs, one containing diesel and the other containing gasoline, and three drums of unknown contents were observed at the southwest corner

of the building. Five natural gas pipeline markers were observed at this site. Two of these natural gas markers were along the east edge of the site and the other three markers were along the south edge of the site. Based on the pipeline markers observed on the site and other sites in the vicinity, this pipeline separates into two pipelines; one likely oriented north-south and the other oriented east-west. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted a commercial building on the southeast corner of the site and agricultural use across the rest of the site. According to ISGS records, in 1941, an oil well (designated as 32a on Attachment 2, page 2) was completed at this site. The 1952 through 1980 aerial photographs depicted this well, the same building, and vacant grassy land across the rest of the site. The 1988 through 1993 aerial photographs depicted the same building. The use of this building could not be determined from the aerials. On the 1998 and later aerial photographs, the site had its current configuration. The 1921 through 1995 city directories did not list this address. In the 2001 and later city directories, the current occupant was listed. According to a local resident, this site was occupied by an auto repair shop prior to the current occupant. A site employee indicated the current business has been present since 1995.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s). Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, monitoring wells, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); ASTs; drums; evidence of former chemical use; solid waste.

The following de minimis conditions were identified at this site: Natural gas pipeline; potential ACM and lead paint.

Site 3160-33. Vacant land, 7000 block of IL 37, Benton Township (east of IL 37 between Minier and Andrews Roads; approximate station east of 44+00+00 RT; Attachment 2, page 2). This site is occupied by vacant wooded land. A complete site investigation could not be done

due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted vacant grassy land. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1998 aerial photographs depicted an oil well and vacant wooded land across the rest of the site. On the 2005 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

No de minimis conditions were identified at this site.

Site 3160-34. Vacant land, 12000 block of Wyatt Road, Benton Township (northeast and southeast corners of UPRR and Wyatt Road; approximate station east of 47+00 LT; Attachment 2, page 2). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted vacant grassy land. On the 1952 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs or de minimis conditions were identified at this site.

Site 3160-35. Vacant land, 7000 block of IL 37, Benton Township (southeast quadrant of IL 37 and Andrews Road; approximate station east of 51+00 LT; Attachment 2, page 3). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted vacant grassy land. According to ISGS records, in 1941, an oil well (designated as 35a on Attachment 2, page 3) was completed at this site. The 1952 through 1971 aerial photographs depicted an oil well and vacant wooded land across the rest of the site. On the 1980 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

No de minimis conditions were identified at this site.

Site 3160-36. UPRR, 6000-7000 blocks of IL 37, Benton Township (northeast and southeast corners of IL 37 and Andrews Road; approximate station 49+00 to 80+50 LT; Attachment 2, page 3). This site is occupied by a railroad and its adjoining ROW. This site crosses a Middle Fork Big Muddy River tributary (Site 3160-42). The railroad grade was elevated above the surrounding ground. The composition of the fill material used to elevate the railroad grade is unknown. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, a railroad was present at this site. The date of earliest development is unknown. On the 1938 and later aerial photographs, a railroad was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, storage tanks (above or

underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The composition of the fill material used to elevate the railroad grade is unknown.
- The date of earliest development is unknown.

Because there are no buildings present and no evidence of fill containing demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Fill of unknown composition.

No de minimis conditions were identified at this site.

Site 3160-37. Vacant land, 7000 block of IL 37, Browning Township (southwest corner of IL 37 and Andrews Road; approximate station 52+00 RT; Attachment 2, page 3). This site is occupied by vacant grassy land. A natural gas pipeline marker was observed on the northeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1993 aerial photographs depicted agricultural use. On the 1998 and later aerial photographs, vacant grassy land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-38. Agricultural land, 7000 block of IL 37, Benton and Browning Townships (east and west of IL 37 between Andrews and Forest Baptist Church Roads; approximate station 53+50 to 68+50 RT and east of 52+50 to 68+00 LT; Attachment 2, page 3). This site is occupied by agricultural land. A natural gas pipeline marker and vent pipe were observed nearly centered

along the east edge of the portion of this site that was west of IL 37. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, agricultural use was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-39. Agricultural land, 7000 block of IL 37, Benton Township (east of IL 37 between Andrews and Forest Baptist Church Roads; approximate station east of 58+50 LT; Attachment 2, page 3). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1980 aerial photographs depicted an oil well. On the 1988 and later aerial photographs, agricultural use was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

The following de minimis condition was identified at this site: Likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-40. Vacant land, 7000 block of IL 37, Benton Township (east of IL 37 between Andrews and Forest Baptist Church Roads; approximate station east of 61+50 LT; Attachment 2, page 3). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1993 aerial photographs depicted agricultural use. On the 1998 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-41. Agricultural land, 7000 block of IL 37, Benton Township (east of IL 37 between Andrews and Forest Baptist Church Roads; approximate station 65+00 LT; Attachment 2, page 3). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1980 aerial photographs depicted an oil well. On the 1988 and later aerial photographs, agricultural use was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

The following de minimis condition was identified at this site: Likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-42. Middle Fork Big Muddy River tributary, 7000 block of IL 37, Benton and Browning Townships (east and west sides of IL 37 between Andrews and Forest Baptist Church Roads; approximate station 68+80 LT and RT; Attachment 2, page 3). This site is occupied by a stream. This stream crosses Site 3160-36, Site 3160-43, and Site 3160-44. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-38 and Site 3160-45, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. According to the 2016 IEPA Illinois Integrated Water Quality report, this Middle Fork Big Muddy River tributary has not been assessed in the project area. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this stream was not depicted. On the 1938 and later aerial photographs, the current stream was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-38 and Site 3160-45, and it is likely that a natural gas pipeline passes through this site as well.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely natural gas pipeline.

Site 3160-43. Vacant land, 7000 block of IL 37, Browning Township (west side of IL 37 between Andrews and Forest Baptist Church Roads; approximate station 69+50 RT; Attachment 2, page 3). This site is occupied by vacant grassy land. This site is crossed by a Middle Fork Big Muddy River tributary (Site 3160-42). No natural gas pipeline markers were

observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-38 and Site 3160-45, and it is likely that a natural gas pipeline passes through this site as well. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1988 aerial photographs depicted agricultural use. On the 1993 and later aerial photographs, vacant grassy land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-38 and Site 3160-45, and it is likely that a natural gas pipeline passes through this site as well.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-44. Vacant land, 7000 block of IL 37, Benton Township (east of IL 37 between Andrews and Forest Baptist Church Roads; approximate station east of 70+00 LT; Attachment 2, page 3). This site is occupied by vacant wooded land. This site is crossed by a Middle Fork Big Muddy River tributary (Site 3160-42). A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. On the 1952 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-45. Residence, 7127 IL 37, Browning Township (northwest quadrant of IL 37 and Forest Baptist Church Road; approximate station 71+00 RT; Attachment 2, page 3). This site is occupied by a residence and two outbuildings. A natural gas pipeline marker was observed at northeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. A pole-mounted transformer was observed on the southeast corner of the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, two oil wells (designated as 45a and 45b, respectively on Attachment 2, page 3) were completed at this site. The 1952 through 1980 aerial photographs depicted the same oil wells and agricultural use across the rest of the site. The 1988 through 2005 aerial photographs depicted agricultural use. On the 2006 and later aerial photographs, the current residence was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed after 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint is unlikely to be present in these buildings.

The following REC was identified at this site: Evidence of former chemical use; former ASTs.

The following de minimis conditions were identified at this site: Transformer; natural gas pipeline; potential ACM.

Site 3160-46. Vacant land, 7000 block of IL 37, Benton Township (east of IL 37 between Minier and Andrews Roads; approximate station east of 73+00 LT; Attachment 2, page 2). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked

for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted vacant grassy land. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1980 aerial photographs depicted an oil well and vacant wooded land across the rest of the site. On the 1988 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

No de minimis conditions were identified at this site.

Site 3160-47. Residence, 12189 Forest Baptist Church Road, Browning Township (northwest corner of IL 37 and Forest Baptist Church Road; approximate station 74+50 RT; Attachment 2, page 3). This site is occupied by a residence and two outbuildings. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-45 and at the southwest corner of IL 37 and Forest Baptist Church Road (Site 3160-49; Attachment 2, page 4), and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 2005 aerial photographs depicted agricultural use. On the 2006 and later aerial photographs, the current residence was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Site 3160-45 and at the southwest corner of IL 37 and Forest Baptist Church Road (Site 3160-49; Attachment 2, page 4), and it is likely that a natural gas pipeline passes through this site as well.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed after 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint is unlikely to be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; potential ACM.

Site 3160-48. Vacant land, 7000 block of IL 37, Benton Township (northeast and southeast quadrants of IL 37 and Forest Baptist Church Road; approximate station east of 76+00 LT; Attachment 2, page 3). This site is occupied by vacant wooded land with a pond on the southern portion of the site. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. The 1952 through 2006 aerial photographs depicted vacant wooded land. On the 2007 and later aerial photographs, vacant wooded land and the current pond were depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-49. Agricultural land, 6000 block of IL 37, Benton and Browning Townships (east and west of IL 37 between Forest Baptist Church Road and Commerce Lane; approximate station 76+00 to 100+50 RT and east of 78+50 to 96+00 LT; Attachment 2, page 4). This site

is occupied by agricultural land. A natural gas pipeline marker was observed on the southwest corner of IL 37 and Forest Baptist Church Road. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, agricultural use was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-50. Vacant land, 6000 block of IL 37, Browning Township (southwest quadrant of IL 37 and Forest Baptist Church Road; approximate station 78+50 RT; Attachment 2, page 4). This site is occupied by vacant wooded land. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-49 and Site 3160-55, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1971 aerial photographs depicted an oil well, a tank battery consisting of three ASTs, and vacant grassy land across the rest of the site. On the 1980 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-49 and Site 3160-55, and it is likely that a natural gas pipeline passes through this site as well.
- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Evidence of former chemical use; former ASTs.

The following de minimis condition was identified at this site: Likely natural gas pipeline.

Site 3160-51. UPRR, 6000 block of IL 37, Benton Township (southeast quadrant of IL 37 and Forest Baptist Church Road; approximate station 78+50 to 104+50 LT; Attachment 2, page 4). This site is occupied by a railroad and its adjoining ROW. This site crosses a Middle Fork Big Muddy River tributary (Site 3160-60). The railroad grade was elevated above the surrounding ground. The composition of the fill material used to elevate the railroad grade is unknown. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, a railroad was present at this site. The date of earliest development is unknown. On the 1938 and later aerial photographs, a railroad was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- The composition of the fill material used to elevate the railroad grade is unknown.
- The date of earliest development is unknown.

Because there are no buildings present and no evidence of fill containing demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Fill of unknown composition.

No de minimis conditions were identified at this site.

Site 3160-52. Agricultural land, 6000 block of IL 37, Benton Township (southeast quadrant of IL 37 and Forest Baptist Church Road; approximate station east of 79+00 LT; Attachment 2, page 4). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial

photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1971 aerial photographs depicted an oil well and agricultural use across the rest of the site. On the 1980 and later aerial photographs, agricultural use was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

The following de minimis condition was identified at this site: Likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-53. Vacant land, 6000 block of IL 37, Browning Township (west side of IL 37 between Forest Baptist Church Road and Commerce Lane; approximate station 85+00 RT; Attachment 2, page 4). This site is occupied by vacant wooded land. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-49 and Site 3160-55, and it is likely that a natural gas pipeline passes through this site as well. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. The 1952 through 1971 aerial photographs depicted vacant grassy land. On the 1980 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-49 and Site 3160-55, and it is likely that a natural gas pipeline passes through this site as well.

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-54. Agricultural land, 6000 block of IL 37, Benton Township (east of IL 37 between Forest Baptist Church Road and Commerce Lane; approximate station east of 88+50 LT; Attachment 2, page 4). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1980 aerial photographs depicted an oil well and agricultural use across the rest of the site. On the 1988 and later aerial photographs, agricultural use was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

The following de minimis condition was identified at this site: Likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-55. Vacant land, 6000 block of IL 37, Browning Township (west side of IL 37 between Forest Baptist Church Road and Commerce Lane; approximate station 89+00 RT; Attachment 2, page 4). This site is occupied by vacant wooded land. A natural gas pipeline marker was observed on the southeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial

photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1980 aerial photographs depicted an oil well and vacant grassy land across the rest of the site. On the 1988 and later aerial photographs, vacant wooded land was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-56. Agricultural land, 6000 block of IL 37, Browning Township (west side of IL 37 between Forest Baptist Church Road and Commerce Lane; approximate station 91+00 RT; Attachment 2, page 4). This site is occupied by agricultural land. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-55 and Site 3160-59, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. According to ISGS records, in 1941, an oil well was completed at this site. The 1952 through 1980 aerial photographs depicted an oil well and agricultural use across the rest of the site. On the 1988 and later aerial photographs, agricultural use was depicted.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-55 and Site 3160-59, and it is likely that a natural gas pipeline passes through this site as well.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Evidence of former chemical use.

The following de minimis conditions were identified at this site: Likely natural gas pipeline; likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-57. Vacant land, 6000 block of IL 37, Benton Township (east of IL 37 between Forest Baptist Church Road and Commerce Lane; approximate station east of 99+00 LT; Attachment 2, page 4). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, vacant wooded land was depicted. According to ISGS records, in 1942, an oil well was completed at this site. No evidence of this oil well was observed on any of the available aerial photographs and no evidence was observed during fieldwork for this project. The presence of the oil well listed in ISGS records could not be verified.

Potential hazards associated with oil wells include VOCs, SVOCs, and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.
- The presence of the oil well listed in ISGS records could not be verified.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Potential former chemical use.

No de minimis conditions were identified at this site.

Site 3160-58. Vacant land, 6000 block of IL 37, Benton Township (east of IL 37 between

Forest Baptist Church Road and Commerce Lane; approximate station east of 101+50 LT; Attachment 2, page 4). This site is occupied by vacant wooded land. This site is crossed by a Middle Fork Big Muddy River tributary (Site 3160-60). A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. On the 1938 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs or de minimis conditions were identified at this site.

Site 3160-59. Vacant land, 6000 block of IL 37, Browning Township (northwest corner of IL 37 and Commerce Lane; approximate station 101+50 RT; Attachment 2, page 4). This site is occupied by vacant wooded land. This site is crossed by a Middle Fork Big Muddy River tributary (Site 3160-60). A natural gas pipeline marker was observed on the southeast corner of this site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 aerial photograph depicted agricultural use. The 1952 through 1959 aerial photographs depicted vacant grassy land. On the 1965 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-60. Middle Fork Big Muddy River tributary, 6000 block of IL 37, Benton and Browning Townships (northwest and northeast quadrants of IL 37 and Commerce Lane; approximate station 101+30 LT and RT; Attachment 2, page 4). This site is occupied by a stream. This stream crosses Site 3160-51, Site 3160-58, and Site 3160-59. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-55 and Site 3160-59, and it is likely that a natural gas pipeline passes through this site as well. Based on the pipeline markers observed on other sites in the vicinity, this pipeline is likely oriented north-south. According to the 2016 IEPA Illinois Integrated Water Quality report, this Middle Fork Big Muddy River tributary has not been assessed in the project area. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this stream was not depicted. On the 1938 and later aerial photographs, the current stream was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed along the west side of IL 37 at Sites 3160-55 and Site 3160-59, and it is likely that a natural gas pipeline passes through this site as well.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely natural gas pipeline.

Site 3160-61 (2651-23 [partial]). Agricultural land, 5000 block of IL 37, Denning Township, and 6000 block of IL 37, Benton and Browning Townships (east and west of IL 37 from Commerce Lane to south of Yellow Banks Road; approximate station 103+50 to 131+00 RT and east of 104+50 to 129+00 LT; Attachment 2, page 5). This site is occupied by agricultural land. A natural gas pipeline marker was observed on the southwest corner of IL 37 and Yellow Banks Road. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. This site did not appear on any of the regulatory lists checked for this project.

The 1900 through 1918 plat maps depicted this site under individual ownership. The 1940 plat map

depicted most of this site under individual ownership and the portion southwest of IL 37 and Yellow Banks Road under ownership of Chicago, Wilmington & Franklin Fuel Co. The 1938 through 1971 aerial photographs depicted a residence on the northwest corner of IL 37 and Yellow Banks Road and agricultural use across the rest of the site. On the 1964 and later plat maps, this site was depicted under individual ownership. On the 1980 and later aerial photographs, agricultural use was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipeline; likely pesticide and/or herbicide use based on agricultural land use.

Site 3160-62 (2651-32 [partial]). UPRR, 5000 block of IL 37, Frankfort Township, and 6000 block of IL 37, Benton Township (southeast quadrant of IL 37 and Commerce Lane; approximate station 104+50 to 131+00 LT; Attachment 2, page 5). This site is occupied by a railroad and its adjoining ROW. The railroad grade was elevated above the surrounding ground. The composition of the fill material used to elevate the railroad grade is unknown. A railroad signal box was observed along the west side of the railroad and south of Reumbler Crossing Road. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, a railroad was present at this site. The date of earliest development is unknown. On the 1938 and later aerial photographs, a railroad was depicted.

Potential hazards associated with railroad signal boxes include batteries and metals.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gaps were identified at this site:

- The composition of the fill material used to elevate the railroad grade is unknown.
- The date of earliest development is unknown.

Because there are no buildings present and no evidence of fill containing demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following RECs were identified at this site: Fill of unknown composition; railroad signal box.

No de minimis conditions were identified at this site.

Site 3160-63. Vacant land, east of 6000 block of IL 37, Benton Township (east of IL 37 between Commerce Lane and Ruempler Crossing Road; approximate station east of 116+00 LT; Attachment 2, page 5). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1971 aerial photographs depicted agricultural use. On the 1980 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3160-64. Residence, 6229 IL 37, Benton Township (northwest quadrant of IL 37 and Yellow Banks Road; approximate station 117+00 RT; Attachment 2, page 5). This site is occupied by a residence and three outbuildings. An AST of unknown contents was observed along the east side of the northern outbuilding. A natural gas pipeline marker was observed on the northeast corner of the site. Based on the pipeline marker observed on the site and other sites in the vicinity, this pipeline is likely oriented north-south. A pole-mounted transformer was observed centered along the south edge of the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 through 1971 aerial photographs depicted a farmstead with the current residence. On the 1980 and later aerial photographs, the site had its current configuration.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, drums, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- The contents of the AST are unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

The following REC was identified at this site: AST.

The following de minimis conditions were identified at this site: Natural gas pipeline; transformer; potential ACM and lead paint.

Site 3160-65. Vacant land, 5000 block of IL 37, Frankfort Township (southeast of IL 37 and Ruembler Crossing Road; approximate station east of 130+20 LT; Attachment 2, page 5). This site is occupied by vacant wooded land. A complete site investigation could not be done due to dense vegetation across the site. This site did not appear on any of the regulatory lists checked for this project.

On the 1900 and later plat maps, this site was depicted under individual ownership. The 1938 and 1652 aerial photographs depicted agricultural use. The 1959 through 1980 aerial photographs depicted vacant grassy land. On the 1988 and later aerial photographs, vacant wooded land was depicted.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during site inspections by ISGS on February 3 and 17, 2016.

The following data gap was identified at this site:

- A complete site investigation could not be done due to dense vegetation across the site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

ADJOINING SITES

The ISGS conducted a search of federal, state, and other environmental databases for reported environmental concerns on sites adjoining the project. For certain resources, the search distances may have been expanded when deemed applicable in the judgment of the project manager. Refer to the Appendix for complete citations for these databases and the date of update of each database. Sites along the project are listed in the preceding section. Sites adjoining the project that do not appear on regulatory databases are not included. The following sites adjoining but not along, the project were identified.

Federal records

SEMS: NPL, Active, and Archived
None.

RCRA sites subject to corrective action (CORRACTS)
None.

RCRA sites – non-CORRACTS TSD
None.

RCRA sites – other
None.

Brownfields pilot sites
None.

Non-LUST releases
None.

State records

Leaking underground storage tanks (LUST)
None.

Registered underground storage tanks (UST)
None.

Activity and Use Limitations (including institutional controls, engineered barriers, and Highway Authority Agreements)
None.

Brownfields
None.

IEPA Bureau of Land Inventory
Site 3160-A. Amanda Barnhart, 12180 Andrews Road, Benton. IEPA #0550255004.
Adjoining property to the south of Site 3160-32 and to the west of Site 3160-37 (Attachment

2, page 3).

IEPA Site Remediation Program
None.

Non-LUST releases
None.

Municipal records
None.

Tribal records
There are no tribally owned lands in the state of Illinois; therefore, the checking of tribal records is not applicable for this report.

CONCLUSIONS

(1) RECs were identified at the following sites along the project:

- Site 3160-5: UPRR. Railroad signal boxes.
- Site 3160-6: Freeman Environmental Services, Inc. Former UST; evidence of chemical use; transformers; potential ACM and lead paint.
- Site 3160-8: J.W. Reynolds Memorial. Potential UST(s); potential former chemical use; potential ACM and lead paint.
- Site 3160-9: C.N.C. Guns & Ammo. Potential UST(s); potential former chemical use; transformers; potential ACM and lead paint.
- Site 3160-10: Benton Grade School District #47. Potential UST(s); potential former chemical use; potential ACM and lead paint.
- Site 3160-13: Masonic & Odd Fellows Cemetery. AST; former dumping; potential ACM and lead paint.
- Site 3160-16: Residence. ASTs; natural gas pipeline; potential ACM and lead paint.
- Site 3160-21: UPRR. Fill; petroleum pipeline; railroad signal box.
- Site 3160-22: Vacant land. Petroleum pipeline.
- Site 3160-23: Vacant land. Former ASTs; evidence of former chemical use; natural gas pipeline; likely past pesticide and/or herbicide use.
- Site 3160-25: Commercial building and residence. Potential UST(s); former ASTs; drums; evidence of former chemical use; solid waste; likely natural gas pipeline; potential ACM and lead paint.
- Site 3160-26: Residence. Petroleum pipeline; likely natural gas pipeline; potential ACM and lead paint.
- Site 3160-28: Vacant land. Potential UST(s); potential former chemical use; natural gas pipeline.
- Site 3160-29: Vacant land. Former ASTs; evidence of former chemical use; likely past pesticide and/or herbicide use.
- Site 3160-32: Route 37 Collection Center. Potential UST(s); ASTs; drums; evidence of former chemical use; solid waste; natural gas pipeline; potential ACM and lead paint.
- Site 3160-33: Vacant land. Evidence of former chemical use.
- Site 3160-35: Vacant land. Evidence of former chemical use.
- Site 3160-36: UPRR. Fill.
- Site 3160-39: Agricultural land. Evidence of former chemical use; likely pesticide and/or herbicide use.
- Site 3160-41: Agricultural land. Evidence of former chemical use; likely pesticide and/or herbicide use.
- Site 3160-45: Residence. Evidence of former chemical use; transformer; natural gas pipeline; potential ACM.
- Site 3160-46: Vacant land. Evidence of former chemical use.
- Site 3160-50: Vacant land. Evidence of former chemical use; former ASTs; likely natural gas pipeline.
- Site 3160-51: UPRR. Fill.
- Site 3160-52: Agricultural land. Evidence of former chemical use; likely pesticide and/or herbicide use.
- Site 3160-54: Agricultural land. Evidence of former chemical use; likely pesticide and/or herbicide use.
- Site 3160-55: Vacant land. Evidence of former chemical use; natural gas pipeline; likely

- past pesticide and/or herbicide use.
 - Site 3160-56: Agricultural land. Evidence of former chemical use; likely natural gas pipeline; likely pesticide and/or herbicide use.
 - Site 3160-57: Vacant land. Potential former chemical use.
 - Site 3160-62: UPRR. Fill; railroad signal box.
 - Site 3160-64: Residence. AST; natural gas pipeline; transformer; potential ACM and lead paint.
- (2) De minimis conditions were identified at the following sites along the project:
- Site 3160-1: Greater Life Sanctuary. Potential ACM and lead paint.
 - Site 3160-2: Residence. Potential ACM and lead paint.
 - Site 3160-3: Commercial building. Transformer; potential ACM and lead paint.
 - Site 3160-4: Residences. Potential ACM and lead paint.
 - Site 3160-11: Roger Clark Veterinary and residence. Potential ACM and lead paint.
 - Site 3160-14: Residence. Potential ACM and lead paint.
 - Site 3160-15: Agricultural land. Likely pesticide and/or herbicide use.
 - Site 3160-17: Residence. Natural gas pipeline; potential ACM and lead paint.
 - Site 3160-18: Residence. Potential ACM and lead paint.
 - Site 3160-19: Vacant land. Natural gas pipeline; likely past pesticide and/or herbicide.
 - Site 3160-20: Vacant land. Natural gas pipeline; likely past pesticide and/or herbicide.
 - Site 3160-24: Residences. Natural gas pipeline; potential ACM and lead paint.
 - Site 3160-27: Agricultural land. Likely natural gas pipeline; likely pesticide and/or herbicide use.
 - Site 3160-30: Vacant land. Likely past pesticide and/or herbicide use.
 - Site 3160-31: Pearson's Skating Rink. Likely natural gas pipeline; potential ACM and lead paint.
 - Site 3160-37: Vacant land. Natural gas pipeline; likely past pesticide and/or herbicide use.
 - Site 3160-38: Agricultural land. Natural gas pipeline; likely pesticide and/or herbicide use.
 - Site 3160-40: Vacant land. Likely past pesticide and/or herbicide use.
 - Site 3160-42: Middle Fork Big Muddy River tributary. Likely natural gas pipeline.
 - Site 3160-43: Vacant land. Likely natural gas pipeline; likely past pesticide and/or herbicide use.
 - Site 3160-44: Vacant land. Likely past pesticide and/or herbicide use.
 - Site 3160-47: Residence. Likely natural gas pipeline; potential ACM.
 - Site 3160-48: Vacant land. Likely past pesticide and/or herbicide use.
 - Site 3160-49: Agricultural land. Natural gas pipeline; likely pesticide and/or herbicide use.
 - Site 3160-53: Vacant land. Likely natural gas pipeline; likely past pesticide and/or herbicide use.
 - Site 3160-59: Vacant land. Natural gas pipeline; likely past pesticide and/or herbicide use.
 - Site 3160-60: Middle Fork Big Muddy River tributary. Likely natural gas pipeline.
 - Site 3160-61: Agricultural land. Natural gas pipeline; likely pesticide and/or herbicide use.
 - Site 3160-63: Vacant land. Likely past pesticide and/or herbicide use.
 - Site 3160-65: Vacant land. Likely past pesticide and/or herbicide use.
- (3) No RECs or de minimis conditions were identified at the following sites along the project:
- Site 3160-7: Vacant land.
 - Site 3160-12: Vacant land.

- Site 3160-34: Vacant land.
 - Site 3160-58: Vacant land.
- (4) The following property was identified that appears on an environmental database and that is adjoining, but not along, the project:
- Site 3160-A: Amanda Barnhart. BOL.
- (5) The entire project area is undermined by some form of the room-and-pillar method, and therefore may be subject to subsidence.
- (6) According to the U.S. Geological Survey, the project is located in an area where the peak horizontal ground accelerations on bedrock (expressed as a percentage of the gravitational acceleration, g) that have a 2% probability of being exceeded in 50 years are between 20% and 80% g. These accelerations are from the USGS 2014 national seismic hazard maps that incorporate the earthquake magnitudes and rates of return from historical events and expected maximum magnitudes from all known fault zones and background events for the general geologic setting. These accelerations on bedrock may be modified by the soils and be greater on the ground surface.
- (7) For the purposes of this report, the following are considered to be de minimis conditions:
- Normal use of lead-based paint on exteriors and interiors of buildings and structures.
 - Use of asbestos-containing materials in building construction.
 - Transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use.
 - Agricultural use of pesticides and herbicides. In addition, most land in Illinois was under agricultural use prior to its conversion to residential, industrial, or commercial development. Pesticides, both regulated and otherwise, may have been used throughout the project area at any time. Unless specifically discussed elsewhere in this report, no information regarding past pesticide use that would be subject to enforcement action was located for this project, and such use is considered a de minimis condition.

ENDORSEMENTS

James Geiger

Project Manager: _____
Jim Geiger

Date: 04/14/16

Anne L. Ellison

Approved: _____
Anne Ellison, P.G., State of Illinois
License #196-000546

Date: 04/14/16



ADDRESS LISTINGS

The following addresses along the project were evaluated for this project. Addresses of sites, if any, adjoining but not along the project are not listed here; see text for discussion of these sites.

| Property name and address | ISGS site # | Parcel # |
|---|-------------|----------|
| Greater Life Sanctuary 1208 S. Main Street, Benton | 3160-1 | NA |
| Residence 1209 S. Main Street, Benton | 3160-2 | NA |
| Commercial building 1301 S. Main Street, Benton | 3160-3 | NA |
| Residence 102 E. Capital Street, Benton | 3160-4 | NA |
| Residence 202 E. Capital Street, Benton | 3160-4 | NA |
| UPRR 1400 block of S. Main Street, Benton | 3160-5 | NA |
| Freeman Environmental Services, Inc. 307 E. Capital Street, Benton | 3160-6 | NA |
| Vacant land 300 block of Wastena Street, Benton | 3160-7 | NA |
| J.W. Reynolds Memorial 1410 S. Main Street, Benton | 3160-8 | NA |
| C.N.C. Guns & Ammo 1401 S. Main Street, Benton | 3160-9 | NA |
| Benton Grade School District #47 1403 S. Main Street, Benton | 3160-10 | NA |
| Roger Clark Veterinary 12733 Oddfellow Lane, Benton | 3160-11 | NA |
| Residence 12733 Oddfellow Lane, Benton | 3160-11 | NA |
| Vacant land 12700 block of Oddfellow Lane, Benton | 3160-12 | NA |
| Masonic & Odd Fellows Cemetery 12740 Oddfellow Lane, Benton | 3160-13 | NA |

| | | |
|---|---------|----|
| Residence 1411 S. Main Street, Benton | 3160-14 | NA |
| Agricultural land 1400 block of S. Main Street, Benton | 3160-15 | NA |
| Residence 12524 S. Park Road, Benton Township | 3160-16 | NA |
| Residence 8046 Minier Road, Benton Township | 3160-17 | NA |
| Residence 7968 Minier Road, Benton Township | 3160-18 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-19 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-20 | NA |
| UPRR 7000 block of IL 37, Benton Township | 3160-21 | NA |
| Vacant land 7000 block of Minier Road, Benton Township | 3160-22 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-23 | NA |
| Residence 7843 IL 37, Benton Township | 3160-24 | NA |
| Residence 7871 IL 37, Benton Township | 3160-24 | NA |
| Commercial building 7837 IL 37, Benton Township | 3160-25 | NA |
| Residence 7837 IL 37, Benton Township | 3160-25 | NA |
| Residence 7789 IL 37, Benton Township | 3160-26 | NA |
| Agricultural land 7000 block of IL 37, Benton Township | 3160-27 | NA |
| Vacant land 7745 IL 37, Benton Township | 3160-28 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-29 | NA |

| | | |
|---|---------|----|
| Vacant land 7000 block of IL 37, Benton Township | 3160-30 | NA |
| Pearson's Skating Rink 7697 IL 37, Benton Township | 3160-31 | NA |
| Route 37 Collection Center 7533 IL 37, Browning Township | 3160-32 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-33 | NA |
| Vacant land 12000 block of Wyatt Road, Benton Township | 3160-34 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-35 | NA |
| UPRR 6000-7000 blocks of IL 37, Benton Township | 3160-36 | NA |
| Vacant land 7000 block of IL 37, Browning Township | 3160-37 | NA |
| Agricultural land 7000 block of IL 37, Benton and Browning Townships | 3160-38 | NA |
| Agricultural land 7000 block of IL 37, Benton Township | 3160-39 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-40 | NA |
| Agricultural land 7000 block of IL 37, Benton Township | 3160-41 | NA |
| Middle Fork Big Muddy River tributary 7000 block of IL 37, Benton and Browning Townships | 3160-42 | NA |
| Vacant land 7000 block of IL 37, Browning Township | 3160-43 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-44 | NA |
| Residence 7127 IL 37, Browning Township | 3160-45 | NA |
| Vacant land 7000 block of IL 37, Benton Township | 3160-46 | NA |
| Residence 12189 Forest Baptist Church Road, Browning Township | 3160-47 | NA |

| | | |
|--|---------|----|
| Vacant land 7000 block of IL 37, Benton Township | 3160-48 | NA |
| Agricultural land 6000 block of IL 37, Benton and Browning Townships | 3160-49 | NA |
| Vacant land 6000 block of IL 37, Browning Township | 3160-50 | NA |
| UPRR 6000 block of IL 37, Benton Township | 3160-51 | NA |
| Agricultural land 6000 block of IL 37, Benton Township | 3160-52 | NA |
| Vacant land 6000 block of IL 37, Browning Township | 3160-53 | NA |
| Agricultural land 6000 block of IL 37, Benton Township | 3160-54 | NA |
| Vacant land 6000 block of IL 37, Browning Township | 3160-55 | NA |
| Agricultural land 6000 block of IL 37, Browning Township | 3160-56 | NA |
| Vacant land 6000 block of IL 37, Benton Township | 3160-57 | NA |
| Vacant land 6000 block of IL 37, Benton Township | 3160-58 | NA |
| Vacant land 6000 block of IL 37, Browning Township | 3160-59 | NA |
| Middle Fork Big Muddy River tributary 6000 block of IL 37, Benton and Browning Townships | 3160-60 | NA |
| Agricultural land 5000 block of IL 37, Denning Township, and 6000 block of IL 37, Benton and Browning Townships | 3160-61 | NA |
| UPRR 5000 block of IL 37, Frankfort Township, and 6000 block of IL 37, Benton Township | 3160-62 | NA |
| Vacant land 6000 block of IL 37, Benton Township | 3160-63 | NA |
| Residence 6229 IL 37, Benton Township | 3160-64 | NA |

| | | |
|--|---------|----|
| Vacant land 5000 block of IL 37, Frankfort Township | 3160-65 | NA |
|--|---------|----|

INFORMATION SOURCES

Website addresses listed below were accurate and active as of the date viewed or cited in the Appendix; however, websites change frequently and web addresses may be different in the future or may cease to exist entirely.

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- U.S. Environmental Protection Agency (1982-2014). Toxics Release Inventory (TRI): <http://www2.epa.gov/enviro/tri-search>.
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- U.S. Geological Survey (2014). Earthquake Hazards Program, National Seismic Hazard Map. Peak Acceleration (% g) with 2% Probability of Exceedance in 50 Years: <http://earthquake.usgs.gov/hazards/products/conterminous/2014/2014pga2pct.pdf>.
- U.S. Geological Survey (1963, 1978, 2012, 2015). Topographic maps, 1:24,000 (7.5-minute) series: West Frankfort Quadrangle.
- U.S. Geological Survey and Illinois Environmental Protection Agency (2016). Source Water Assessment Program (SWAP) ArcIMS Mapping Tool: <http://www.epa.illinois.gov/topics/water-quality/swap/index>.
- University Publications of America (1957). Sanborn fire insurance maps. Benton, sheet #s: 6 and

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Weibel, C.P. and Panno, S.V. (1997). Karst terrains and carbonate rocks of Illinois [map], in Karst regions of Illinois. Illinois State Geological Survey Open File Series 1997-2.

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APPENDIX

ISGS PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT CHECKLIST

IDOT: D99-037-03 ISGS: 3160
 City: Benton, and Benton, Browning, Denning, and Frankfort Townships
 County: Franklin
 Location Coordinates: T6S, R2E, Sections 25, 36; T6S, R3E, Sections 19, 30, 31; T7S, R2E, Section 1; T7S, R3E, Section 6

IDOT District Contact: _____ ISGS Lead: Jim Geiger
 Name: Julie Klamm
 Phone: 618-351-5286

| Task | Status* | Date | By |
|--|---------|----------|-----|
| Original Material Copied | MF | 10/28/15 | ALE |
| <i>IDOT Project Location Database – (All other projects/IDOT sites in the vicinity of the project)</i> | | | |
| ▶ Other Preliminary Environmental Site Assessments | MF | 1/4/16 | JWG |
| ▶ Preliminary Site Investigations/Phase II Reports | MF | 1/4/16 | JWG |
| ▶ Maintenance Facilities | NF | 1/4/16 | JWG |
| ▶ Permit-Access Agreements | NF | 1/4/16 | JWG |
| ▶ Draft Highway Authority Agreements/Highway Authority Agreements | NF | 1/4/16 | JWG |
| ▶ Miscellaneous Sites | NF | 1/4/16 | JWG |
| <i>Local Collections</i> | | | |
| ▶ County | NF | 1/4/16 | JWG |
| ▶ City | NF | 1/4/16 | JWG |
| <i>Geologic Information</i> | | | |
| ▶ ISGS Stack-Unit Map (GIS) | MF | 1/5/16 | JWG |
| ▶ ISGS Glacial Drift in Illinois (GIS) | MF | 1/5/16 | JWG |
| ▶ ISGS Bedrock Geology of Illinois (GIS) | MF | 1/5/16 | JWG |
| ▶ USDA NRCS Soil Survey Maps | MF | 1/6/16 | JWG |
| ▶ USDA NRCS Hydric Soils | MF | 1/6/16 | JWG |
| ▶ USDA NRCS Prime Farmland Soils | MF | 1/6/16 | JWG |
| <i>Hydrogeologic Information (non-CE projects only)</i> | | | |
| ▶ IEPA Restricted Status List | NA | 1/4/16 | JWG |
| ▶ USGS-IEPA SWAP-IL Public Water Supplies | NA | 1/4/16 | JWG |
| ▶ ISGS Wells (GIS) | NA | 1/4/16 | JWG |
| ▶ ISWS Public Water Supply Surface Water Intakes in Illinois (GIS) | NA | 1/4/16 | JWG |
| ▶ Potential for Aquifer Contamination Map | NA | 1/4/16 | JWG |
| ▶ Potential for Aquifer Recharge Map | NA | 1/4/16 | JWG |
| ▶ Sole Source Aquifer Protection Program | NA | 1/4/16 | JWG |
| <i>Hydrogeologic Information (all projects)</i> | | | |
| ▶ USGS-IEPA SWAP Wellhead Protection | NF | 1/5/16 | JWG |
| ▶ USGS-IEPA SWAP Fact Sheets /IEPA Well Site Survey Reports | NF | 1/5/16 | JWG |
| <i>Historical Records</i> | | | |
| ▶ Aerial Photographs | MF | 1/11/16 | SRE |
| ▶ USGS Topographic Maps | MF | 1/7/16 | JWG |
| ▶ Plat Maps | MF | 1/7/16 | JWG |
| ▶ Sanborn Fire Insurance Maps: Chadwyck-Healey Inc. | MF | 1/4/16 | JWG |
| ▶ Sanborn Fire Insurance Maps: University Publications of America | MF | 1/4/16 | JWG |
| ▶ Sanborn Fire Insurance Maps: Rascher Publishing Company | NA | 1/4/16 | JWG |
| ▶ City Directories | MF | 2/3/16 | JWG |
| ▶ Industrial Directories (optional) | NF | 2/4/16 | JWG |
| ▶ IEPA-ISGS Summary of Former Manufactured Gas Plant Sites (GIS) | NF | 1/5/16 | JWG |
| ▶ ISGS Draft SEMS Site Coverage (GIS) | NF | 1/5/16 | JWG |
| ▶ ISGS Draft LUST Site Coverage (GIS) | NF | 1/5/16 | JWG |
| ▶ ISGS Draft Landfill Site Coverage (GIS) | NA | 1/5/16 | JWG |

| Task | Status* | Date | By |
|--|---------|---------|-----|
| <i>Federal Records</i> | | | |
| ▸ SEMS (NPL, Active, Archived) | NF | 4/8/16 | JWG |
| ▸ Mercury Site Lists | NF | 4/6/16 | JWG |
| ▸ RCRA CORRACTS | NF | 4/6/16 | JWG |
| ▸ RCRA Non-CORRACTS TSD Facilities | NF | 4/6/16 | JWG |
| ▸ RCRA (Other) | NF | 4/6/16 | JWG |
| ▸ ERNS | NF | 4/6/16 | JWG |
| ▸ Brownfields Pilot Sites | NF | 4/6/16 | JWG |
| ▸ Toxics Release Inventory | NF | 4/6/16 | JWG |
| ▸ SSTS | NF | 4/6/16 | JWG |
| ▸ PCB Transformer Registration Database/PCB Activity Quarterly Reports | NF | 4/6/16 | JWG |
| <i>USEPA Information Request</i> | | | |
| ▸ Sent | NF | 1/5/16 | JWG |
| ▸ Received | NF | 1/5/16 | JWG |
| <i>State Records</i> | | | |
| ▸ IEPA Brownfields | NF | 4/6/16 | JWG |
| ▸ IEPA Bureau of Land Inventory | MF | 4/8/16 | JWG |
| ▸ IEPA Illinois Water Quality Reports | NF | 4/6/16 | JWG |
| ▸ IEPA LUST | NF | 4/8/16 | JWG |
| ▸ IEPA Site Remediation Program | NF | 4/6/16 | JWG |
| ▸ OSFM UST | MF | 4/8/16 | JWG |
| ▸ IEMA non-LUST Incidents | NF | 4/6/16 | JWG |
| ▸ Activity and Use Limitations (AULs) | NF | 4/6/16 | JWG |
| ▸ Groundwater Ordinances | NF | 4/6/16 | JWG |
| ▸ Cook County Bridge List | NF | 4/6/16 | JWG |
| ▸ IDOT Bridge List | NF | 4/6/16 | JWG |
| ▸ Landfills (GIS) | NF | 4/6/16 | JWG |
| ▸ State Underground Injection Control Inventory | NF | 4/6/16 | JWG |
| <i>IEPA BOL Information Request</i> | | | |
| ▸ Sent | MF | 1/5/16 | JWG |
| ▸ Received | MF | 1/11/16 | DJA |
| <i>OSFM Information Request</i> | | | |
| ▸ Sent | MF | 1/5/16 | JWG |
| ▸ Received | MF | 1/5/16 | JWG |
| <i>Local Records</i> | | | |
| ▸ Fire Department Records (optional) | MF | 2/17/16 | JWG |
| <i>Mining Maps and Publications</i> | | | |
| ▸ ISGS Quadrangle/County On-Line Coal Maps and Directories | MF | 1/5/16 | JWG |
| ▸ ISGS Non-Coal Underground Mines | NF | 1/5/16 | JWG |
| ▸ Lead Mining | NF | 1/5/16 | JWG |
| <i>Oil and Gas Information</i> | | | |
| ▸ ISGS Oil and Gas Fields/Oil Wells (ILOIL GIS) | MF | 1/5/16 | JWG |
| ▸ USDOT OPS Pipeline Integrity Management Mapping Application | MF | 1/5/16 | JWG |
| <i>Natural Hazards</i> | | | |
| ▸ USGS Seismic Risk Map | MF | 1/7/16 | JWG |
| ▸ FEMA FIRM Maps | NF | 1/7/16 | JWG |
| ▸ ISGS Landslide Inventory (GIS) | NF | 1/7/16 | JWG |
| ▸ Karst Terrains and Carbonate Rocks of Illinois Maps | NF | 1/7/16 | JWG |
| ▸ USFWS, IDNR, and INHS Illinois Wetlands Inventory (GIS) | MF | 1/7/16 | JWG |

* MF = Material found within search radius; NF = Nothing found within search radius; NA = Not applicable

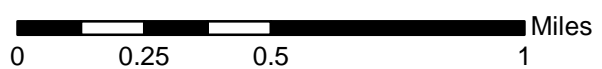
Date of Records Review Completion: April 8, 2016

LIST OF ATTACHMENTS

1. Project location map, ISGS #3160.
2. Site location maps (5 pages).

Attachment 1. Project location map, ISGS #3160.

Project area indicated by heavy black lines.



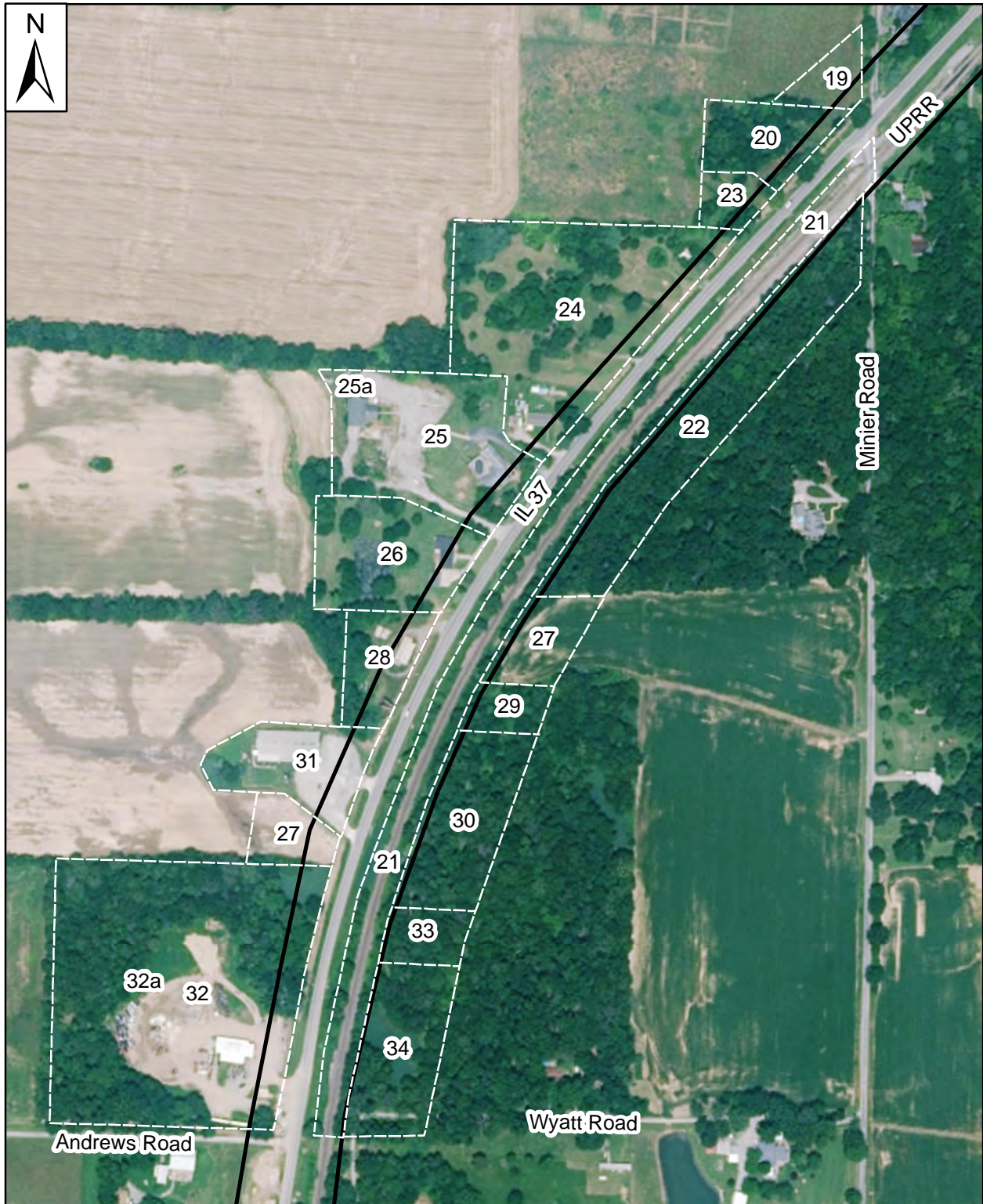
Attachment 2, page 1. Site location map, Sites 3160-1 through 3160-18.

All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 2. Site location map, Sites 3160-19 through 3160-34.

All site boundaries are approximate and should not be used as actual parcel boundaries.

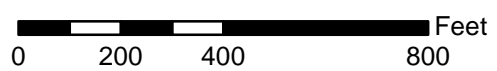
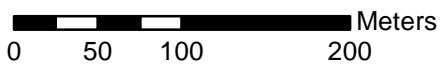


0 50 100 200 Meters

0 200 400 800 Feet

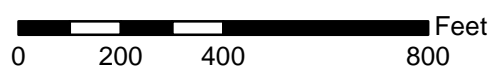
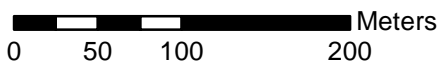
Attachment 2, page 3. Site location map, Sites 3160-35 through 3160-48.

All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 4. Site location map, Sites 3160-49 through 3160-60.

All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 5. Site location map, Sites 3160-61 through 3160-65.

All site boundaries are approximate and should not be used as actual parcel boundaries.



0 50 100 200 Meters

0 200 400 800 Feet


Appendix B – Soil Boring Logs



Amec Foster Wheeler Environment & Infrastructure, Inc.
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 Peoria, IL 61614
 Telephone: (309) 692-4422
 Fax: 248-926-4009

BORING NUMBER 3160-05-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-05-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|------------------------------------|--------------|
| 0 | | | | | | |
| 5 | | | 0 |  | SAND (SP), F-M, BROWN, MOIST, FILL | |
| | | | 0 | | | |
| | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-05-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |



| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-08-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/3/17 | COMPLETED 11/3/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |



| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-08-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/3/17 | COMPLETED 11/3/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-9-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/30/17 | COMPLETED 10/30/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | 0 | | ASPHALT PAVEMENT FINE TO COARSE WHITE GRAVEL FILL SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-9-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/30/17 | COMPLETED 10/30/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | 0.5 SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | | 5.0 Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-9-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/30/17 | COMPLETED 10/30/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN & TAN, MOIST | |
| | | | 0 | | | |
| | | | 0 | 4.0 | | |
| 5 | | | 0 | 5.0 | CLAY (CL), GREY, MOIST | |
| | | | | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-10-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/30/17 COMPLETED 10/30/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| 5 | | | 54 | 0.5 | F-M GRAVEL FILL, TRACE CINDERS, BLACK, MOIST SILT (ML), TAN & GREEN, MOIST, MODERATE PETROLEUM ODORS | |
| | | | 380 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-10-02

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/30/17 COMPLETED 10/30/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |



| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | | 347 | SILTY CLAY (CL-ML), BROWN & TAN, MOIST | |
| 5 | | | | 4.0 5.0 | SILTY CLAY (CL-ML), BLACK & GREYISH GREEN, MOIST, MODERATE TO STRONG PRETROLEUM ODOR Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-10-03

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/30/17 COMPLETED 10/30/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| | | | 25 |  | SILTY CLAY (CL-ML), BLACK AND BROWN, MOIST, FILL | |
| | | | 6 |  | SILT (ML), GREY & GREEN, MOIST, SLIGHT TO MODERATE PETROLEUM ODOR THROUGHOUT | |
| 5 | | | | | Bottom of hole at 5.0 feet. | |



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 Fax: 248-926-4009

BORING NUMBER 3160-16-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| | | | 0 | 0.5 | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILT (ML), WITH F-M SAND, BROWN & TAN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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 Fax: 248-926-4009

BORING NUMBER 3160-16-02

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN & TAN, SLIGHTLY MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-16-03

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| | | | 0 | | 0.5 SILT (ML), BROWN, MOIST | |
| | | | 0 | | SILT (ML), BROWN & TAN, FIRM, SLIGHTLY MOIST | |
| 5 | | | 0 | | 5.0 Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-16-04

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 | COMPLETED 10/31/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|------------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK, MOIST | |
| | | | 0 | | FINE SAND (SP), BROWN & TAN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-16-05

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 | COMPLETED 10/31/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| 5 | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| | | | 0 | | | |
| | | | 0 | | | |
| | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-04

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 COMPLETED 11/2/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-05

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 COMPLETED 11/2/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-06

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-07

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-08

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 COMPLETED 11/2/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-09

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), TRACE F-M WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 |  | | |
| | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-21-10

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), WITH F-M WHITE GRAVEL, BLACK, MOIST | |
| | | | 1.5 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 5.0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-23-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), WITH RED BRICK FRAGMENTS, SOME MED- COARSE GRAVEL, BLACK, MOIST, FILL | |
| | | | 0 |  | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-23-02

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | 0 | X | SILT (ML), BLACK, MOIST | |
| | | | 0 | X | SILT (ML), TRACE BLACK COAL CINDERS, BROWN & TAN, MOIST | |
| 5 | | | 0 | X | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-25-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), TRACE RED BRICK FRAGMENTS, BLACK, MOIST, FILL | |
| | | | 0 |  | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-25-02

CLIENT IDOT PROJECT NAME WO 28 Benton
 PROJECT NUMBER 3160150049.028 PROJECT LOCATION Benton, IL
 DATE STARTED 10/31/17 COMPLETED 10/31/17 GROUND SURFACE ELEVATION HOLE SIZE 2"
 DRILLING CONTRACTOR GSG Consultants GROUND WATER LEVELS:
 DRILLING METHOD Geoprobe AT TIME OF DRILLING ---
 LOGGED BY T. McNally CHECKED BY AT END OF DRILLING ---
 NOTES AFTER DRILLING ---

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), TRACE F-M WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 |  | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-26-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-------------------------------|--------------|
| 0 | | | | | | |
| 0.5 | | | | | F-M WHITE CRUSHED GRAVEL FILL | |
| 0 | | | | | SILT (ML), BROWN, MOIST | |
| 5 | | | | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-26-02

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-----------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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 Telephone: (309) 692-4422
 Fax: 248-926-4009

BORING NUMBER 3160-28-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| | | | 0 | XXXX | SILT (ML), WITH F-M WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 | | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-28-02

CLIENT IDOT PROJECT NAME WO 28 Benton
 PROJECT NUMBER 3160150049.028 PROJECT LOCATION Benton, IL
 DATE STARTED 10/31/17 COMPLETED 10/31/17 GROUND SURFACE ELEVATION _____ HOLE SIZE 2"
 DRILLING CONTRACTOR GSG Consultants GROUND WATER LEVELS:
 DRILLING METHOD Geoprobe AT TIME OF DRILLING ---
 LOGGED BY T. McNally CHECKED BY _____ AT END OF DRILLING ---
 NOTES _____ AFTER DRILLING ---




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN & TAN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-28-03

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), TRACE COARSE WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 |  | SILT (ML), BROWN & TAN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 | COMPLETED 10/31/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-----------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 | COMPLETED 10/31/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN & TAN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 | COMPLETED 10/31/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-----------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-04

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK & BROWN, MOIST | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-05

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-----------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-06

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-32-07

| | |
|--------------------------------------|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/21/17 | COMPLETED 11/21/17 |
| DRILLING CONTRACTOR AMECFW | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Hand Auger | HOLE SIZE 2" |
| LOGGED BY D. Peterson | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| 5 | | | | 5.0 | SILTY CLAY (CL-ML), BROWN & TAN, MOIST | |
| | | | | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 5 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| | | | 0 | | | |
| | | | 0 | | | |
| | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-04

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 COMPLETED 11/2/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-05

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), BLACK, MOIST | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-06

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & TAN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-07

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--------------------------------|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), TAN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-08

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| 5 | | | 0 | 5.0 | SILTY CLAY (CL-ML), BLACK & BROWN, MOIST | |
| | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-09

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|--|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), TRACE MED. WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-10

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|--|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), TRACE COARSE WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 | 1.5 | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-36-11

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | 0 | 1.0 | SILT (ML), BLACK, MOIST | |
| | | | 0 | 5.0 | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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 Telephone: (309) 692-4422
 Fax: 248-926-4009

BORING NUMBER 3160-45-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------------|----------------------------------|--------------|
| 0 | | | | | | |
| 0 | | | 0 | [Hatched Pattern] | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | [Hatched Pattern] | | |
| 10 | | | 0 | [Hatched Pattern] | | |
| | | | | 10.0 | Bottom of hole at 10.0 feet. | |



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BORING NUMBER 3160-45-02

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| 0 | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | | |
| 10 | | | 0 | | | |
| | | | | | Bottom of hole at 10.0 feet. | |



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BORING NUMBER 3160-45-03

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| 0 | | | 0 | █ | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | █ | | |
| 10 | | | 0 | █ | | |
| | | | | █ | Bottom of hole at 10.0 feet. | |



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BORING NUMBER 3160-45-04

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---------------------------------|--------------|
| 0 | | | | | | |
| 0 | | | 0 | | SILTY CLAY (CL-ML) BROWN, MOIST | |
| 5 | | | 0 | | | |
| 10 | | | 0 | | | |
| | | | | | Bottom of hole at 10.0 feet. | |



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BORING NUMBER 3160-50-01

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | 0 | 1.0 | SILT (ML), WITH MED-COARSE WHITE GRAVEL, BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-50-02

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | 1.0 | SILT (ML), BLACK, MOIST | |
| | | | 0 | 5.0 | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-50-03

| | |
|--|---|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 10/31/17 COMPLETED 10/31/17 | GROUND SURFACE ELEVATION _____ HOLE SIZE 2" |
| DRILLING CONTRACTOR GSG Consultants | GROUND WATER LEVELS: |
| DRILLING METHOD Geoprobe | AT TIME OF DRILLING --- |
| LOGGED BY T. McNally CHECKED BY _____ | AT END OF DRILLING --- |
| NOTES _____ | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-51-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-51-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |




| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), BLACK, MOIST | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-51-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/2/17 | COMPLETED 11/2/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILT (ML), BLACK, MOIST | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 |  | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-55-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| 5 | | | | 5.0 | SILTY CLAY (CL-ML), BROWN, MOIST | |
| | | | | | Bottom of hole at 5.0 feet. | |



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 Fax: 248-926-4009

BORING NUMBER 3160-55-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | 1.0 | SILT (ML), BLACK, MOIST | |
| | | | 0 | 5.0 | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-56-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-56-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | | 1.0 | SILT (ML), BLACK, MOIST | |
| | | | | 0 | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| | | | | 0 | | |
| 5 | | | | 5.0 | | |
| | | | | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | | 1.0 | SILT (ML), BLACK, MOIST | |
| | | | | 0 | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| | | | | 0 | | |
| 5 | | | | 5.0 | | |
| | | | | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 5 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| | | | 0 | | | |
| | | | 0 | | | |
| | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-04

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | 2.0 | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-05

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-06

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



Amec Foster Wheeler Environment & Infrastructure, Inc.
 4232 N Brandywine Drive, Suite A
 Peoria, IL 61614
 Telephone: (309) 692-4422
 Fax: 248-926-4009

BORING NUMBER 3160-62-07

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | GROUND WATER LEVELS: |
| CHECKED BY _____ | AT TIME OF DRILLING --- |
| NOTES _____ | AT END OF DRILLING --- |
| | AFTER DRILLING --- |


| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 5 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| | | | 0 | | | |
| | | | 0 | | | |
| | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-08

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|---|---|--------------|
| 0 | | | | | | |
| 0 | | | 0 |  | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-09

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|-----------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BROWN, MOIST | |
| | | | 0 | | | |
| 5 | | | 0 | 5.0 | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-62-10

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | 0 | 1.0 | SILT (ML), BLACK, MOIST | |
| | | | 0 | 5.0 | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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 Fax: 248-926-4009

BORING NUMBER 3160-64-01

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|----------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILTY CLAY (CL-ML), BROWN, MOIST | |
| 5 | | | 0 | | Bottom of hole at 5.0 feet. | |



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 Peoria, IL 61614
 Telephone: (309) 692-4422
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BORING NUMBER 3160-64-02

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---|--------------|
| 0 | | | | | | |
| | | | | | SILT (ML), BLACK, MOIST | |
| | | | | | SILTY CLAY (CL-ML), BROWN & GREY, MOIST | |
| 5 | | | | | Bottom of hole at 5.0 feet. | |



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BORING NUMBER 3160-64-03

| | |
|--|---------------------------------------|
| CLIENT IDOT | PROJECT NAME WO 28 Benton |
| PROJECT NUMBER 3160150049.028 | PROJECT LOCATION Benton, IL |
| DATE STARTED 11/1/17 | COMPLETED 11/1/17 |
| DRILLING CONTRACTOR GSG Consultants | GROUND SURFACE ELEVATION _____ |
| DRILLING METHOD Geoprobe | HOLE SIZE 2" |
| LOGGED BY T. McNally | CHECKED BY _____ |
| NOTES _____ | GROUND WATER LEVELS: |
| | AT TIME OF DRILLING --- |
| | AT END OF DRILLING --- |
| | AFTER DRILLING --- |

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | PID (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | WELL DIAGRAM |
|------------|--------------------|-----------------------|-----------|-------------|---------------------------------|--------------|
| 0 | | | | | | |
| | | | 0 | | 1.0 SILT (ML), BLACK, MOIST | |
| | | | 0 | | SILT (ML), BROWN & GREY, MOIST | |
| 5 | | | 0 | | 5.0 Bottom of hole at 5.0 feet. | |

Appendix C – Laboratory Data

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-136509-1
Client Project/Site: IDOT - Benton - WO 028

For:
AMEC Foster Wheeler E & I, Inc
4232 Brandywine Drive
Suite A
Peoria, Illinois 61614

Attn: Mr. Terry Dixon



Authorized for release by:
11/10/2017 3:20:40 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



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Case Narrative

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Job ID: 500-136509-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-136509-1

Comments

No additional comments.

Receipt

The samples were received on 10/31/2017 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

GC/MS VOA

Method(s) 8260B: The following samples were diluted due to the abundance of non-target analytes: 3160-10-1 (0-2.5') (500-136509-3) and 3160-10-3 (0-2.5') (500-136509-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8082A: The following sample required a mercury clean-up, via EPA Method 3660A, to reduce matrix interferences caused by sulfur: 3160-9-3 (0-4') (500-136509-2). The reagent lot number used was: 165418.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-2 (0-4')

Lab Sample ID: 500-136509-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Antimony | 0.41 | J | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 6.5 | | 0.60 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 84 | | 0.60 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.44 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.60 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.3 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | B | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 10 | 5.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 11 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 210 | B | 0.60 | 0.087 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 29 | | 0.30 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 48 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.51 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.21 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.072 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.025 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.015 | J | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.4 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-9-3 (0-4')

Lab Sample ID: 500-136509-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.021 | | 0.016 | 0.0070 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.0084 | J | 0.038 | 0.0063 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.049 | | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.052 | | 0.038 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.087 | | 0.038 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.037 | J | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.025 | J | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.073 | | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.077 | | 0.038 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.027 | J | 0.038 | 0.0098 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.042 | J | 0.076 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.023 | J | 0.038 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.070 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.069 | | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.48 | J | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 6.6 | | 0.58 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 93 | | 0.58 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.45 | | 0.23 | 0.054 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.37 | B | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.58 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.3 | | 0.29 | 0.076 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | B | 0.58 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 46 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 210 | B | 0.58 | 0.084 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.58 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-3 (0-4') (Continued)

Lab Sample ID: 500-136509-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Vanadium | 26 | | 0.29 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 96 | | 1.2 | 0.51 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.67 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0020 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.030 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.049 | | 0.017 | 0.0057 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.6 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzene | 0.65 | | 0.021 | 0.012 | mg/Kg | 50 | ☼ | 8260B | Total/NA |
| Ethylbenzene | 0.52 | | 0.021 | 0.015 | mg/Kg | 50 | ☼ | 8260B | Total/NA |
| Toluene | 0.22 | | 0.021 | 0.012 | mg/Kg | 50 | ☼ | 8260B | Total/NA |
| Trichloroethene | 0.022 | J | 0.041 | 0.014 | mg/Kg | 50 | ☼ | 8260B | Total/NA |
| Xylenes, Total | 2.6 | | 0.041 | 0.018 | mg/Kg | 50 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0086 | J | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2,4-Dimethylphenol | 0.21 | J | 0.40 | 0.15 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.019 | J | 0.040 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluorene | 0.0096 | J | 0.040 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.63 | | 0.081 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.37 | | 0.040 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.023 | J | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.018 | J | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.48 | J | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.8 | | 0.59 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 84 | | 0.59 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.38 | | 0.24 | 0.055 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.59 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.8 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | B | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 14 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 210 | B | 0.59 | 0.086 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 30 | | 0.30 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 56 | | 1.2 | 0.52 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.66 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.020 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 3.0 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 3.0 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.035 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.34 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.020 | | 0.018 | 0.0061 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.4 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-2 (0-2.5') (Continued)

Lab Sample ID: 500-136509-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Antimony | 0.27 | J | 1.1 | 0.22 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.7 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 130 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.35 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 20 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.0 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 18 | B | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | | 9.9 | 5.2 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 12 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 210 | B | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 13 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 33 | | 0.29 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 53 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.096 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.081 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.21 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.066 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.081 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.018 | | 0.018 | 0.0061 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.8 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.021 | | 0.019 | 0.0082 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Antimony | 0.32 | J | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 6.2 | | 0.60 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 78 | | 0.60 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.27 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.60 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 4.8 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 13 | B | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 11 | 5.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 9.6 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 150 | B | 0.60 | 0.086 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.5 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 30 | | 0.30 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 31 | | 1.2 | 0.52 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.48 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.031 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.28 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.078 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.21 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.011 | J | 0.018 | 0.0059 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.6 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-3 (0-2.5') (Continued)

Lab Sample ID: 500-136509-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil | Fac | D | Method | Prep Type |
|--------------|--------|-----------|--------|--------|-------|-----|-----|-------|--------|-----------|
| Phenanthrene | 0.0064 | J | 0.041 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | | Total/NA |
| Antimony | 0.30 | J | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Arsenic | 9.2 | | 0.58 | 0.20 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Barium | 110 | | 0.58 | 0.066 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Beryllium | 0.42 | | 0.23 | 0.054 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Cadmium | 0.022 | J B | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Chromium | 21 | | 0.58 | 0.29 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Cobalt | 8.3 | | 0.29 | 0.076 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Copper | 16 | B | 0.58 | 0.16 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Iron | 19000 | | 13 | 6.5 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Lead | 16 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Manganese | 250 | B | 0.58 | 0.084 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Nickel | 13 | | 0.58 | 0.17 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Vanadium | 35 | | 0.29 | 0.068 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Zinc | 64 | | 1.2 | 0.51 | mg/Kg | 1 | ☼ | 6010B | | Total/NA |
| Barium | 1.4 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | | TCLP |
| Cadmium | 0.0022 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | | TCLP |
| Cobalt | 0.026 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | | TCLP |
| Copper | 0.042 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | | TCLP |
| Iron | 7.6 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | | TCLP |
| Manganese | 4.1 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | | TCLP |
| Nickel | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | | TCLP |
| Zinc | 0.14 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | | TCLP |
| Iron | 88 | | 0.20 | 0.20 | mg/L | 1 | | 6010B | | SPLP East |
| Manganese | 0.61 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | | SPLP East |
| Mercury | 0.024 | | 0.021 | 0.0068 | mg/Kg | 1 | ☼ | 7471B | | Total/NA |
| pH | 8.2 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

| Method | Method Description | Protocol | Laboratory |
|----------|--|----------|------------|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL CHI |
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL CHI |
| 8082A | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846 | TAL CHI |
| 6010B | Metals (ICP) | SW846 | TAL CHI |
| 6010B | SPLP Metals | SW846 | TAL CHI |
| 6020A | Metals (ICP/MS) | SW846 | TAL CHI |
| 7470A | TCLP Mercury | SW846 | TAL CHI |
| 7471B | Mercury (CVAA) | SW846 | TAL CHI |
| 9045D | pH | SW846 | TAL CHI |
| Moisture | Percent Moisture | EPA | TAL CHI |

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|--------------------|--------|----------------|----------------|
| 500-136509-1 | 3160-9-2 (0-4') | Solid | 10/30/17 13:05 | 10/31/17 08:45 |
| 500-136509-2 | 3160-9-3 (0-4') | Solid | 10/30/17 13:20 | 10/31/17 08:45 |
| 500-136509-3 | 3160-10-1 (0-2.5') | Solid | 10/30/17 13:35 | 10/31/17 08:45 |
| 500-136509-4 | 3160-10-2 (0-2.5') | Solid | 10/30/17 13:50 | 10/31/17 08:45 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Solid | 10/30/17 14:00 | 10/31/17 08:45 |
| 500-136509-6 | 3160-10-3 (0-2.5') | Solid | 10/30/17 14:20 | 10/31/17 08:45 |

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Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-2 (0-4')

Lab Sample ID: 500-136509-1

Date Collected: 10/30/17 13:05

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0085 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00040 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Bromomethane | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 2-Butanone (MEK) | <0.0049 | | 0.0049 | 0.0022 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Carbon disulfide | <0.0049 | | 0.0049 | 0.0010 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Chloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Chloromethane | <0.0049 | | 0.0049 | 0.0020 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,2-Dichloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00094 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 2-Hexanone | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Methylene Chloride | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00063 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00084 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Vinyl acetate | <0.0049 | | 0.0049 | 0.0017 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00063 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:29 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 70 - 134 | 10/31/17 15:36 | 11/02/17 16:29 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 10/31/17 15:36 | 11/02/17 16:29 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Benzo[a]anthracene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-2 (0-4')

Lab Sample ID: 500-136509-1

Date Collected: 10/30/17 13:05

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0084 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 4-Chloroaniline | <0.79 | | 0.79 | 0.18 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.79 | | 0.79 | 0.31 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4-Dinitrophenol | <0.79 | | 0.79 | 0.69 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0072 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Hexachlorobenzene | <0.079 | | 0.079 | 0.0090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Hexachlorocyclopentadiene | <0.79 | | 0.79 | 0.22 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Methylnaphthalene | <0.079 | | 0.079 | 0.0072 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-2 (0-4')

Lab Sample ID: 500-136509-1

Date Collected: 10/30/17 13:05

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.79 | | 0.79 | 0.37 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| N-Nitrosodi-n-propylamine | <0.079 | | 0.079 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Pentachlorophenol | <0.79 | | 0.79 | 0.62 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Phenanthrene | <0.039 | | 0.039 | 0.0054 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Phenol | <0.20 | | 0.20 | 0.087 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 12:58 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 84 | | 44 - 121 | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2-Fluorophenol | 88 | | 46 - 133 | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Nitrobenzene-d5 | 73 | | 41 - 120 | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Phenol-d5 | 75 | | 46 - 125 | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| Terphenyl-d14 | 104 | | 35 - 160 | 11/06/17 15:06 | 11/07/17 12:58 | 1 |
| 2,4,6-Tribromophenol | 104 | | 25 - 139 | 11/06/17 15:06 | 11/07/17 12:58 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0069 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0085 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0064 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0077 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0042 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0096 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:11 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 78 | | 49 - 129 | 11/03/17 07:23 | 11/08/17 02:11 | 1 |
| DCB Decachlorobiphenyl | 84 | | 37 - 121 | 11/03/17 07:23 | 11/08/17 02:11 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.41 | J | 1.2 | 0.23 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Arsenic | 6.5 | | 0.60 | 0.20 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Barium | 84 | | 0.60 | 0.068 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Beryllium | 0.44 | | 0.24 | 0.056 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Cadmium | <0.12 | | 0.12 | 0.022 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Chromium | 17 | | 0.60 | 0.30 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Cobalt | 6.3 | | 0.30 | 0.078 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Copper | 15 | B | 0.60 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Iron | 16000 | | 10 | 5.3 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 19:13 | 1 |
| Lead | 11 | | 0.30 | 0.14 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Manganese | 210 | B | 0.60 | 0.087 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Nickel | 14 | | 0.60 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Selenium | <0.60 | | 0.60 | 0.35 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Silver | <0.30 | | 0.30 | 0.077 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-2 (0-4')

Lab Sample ID: 500-136509-1

Date Collected: 10/30/17 13:05

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 82.1

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.60 | | 0.60 | 0.30 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Vanadium | 29 | | 0.30 | 0.071 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |
| Zinc | 48 | | 1.2 | 0.53 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:11 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Barium | 0.51 | | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Iron | 0.21 J | | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Manganese | 0.072 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Nickel | 0.019 J | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |
| Zinc | 0.025 J | | 0.50 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:38 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/02/17 08:35 | 11/02/17 17:10 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 17:10 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:29 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.015 J | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/01/17 15:30 | 11/02/17 12:20 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|---------------|-----------|-----|-----|------|---|----------|----------------|---------|
| pH | 5.4 HF | | 0.2 | 0.2 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-3 (0-4')

Lab Sample ID: 500-136509-2

Date Collected: 10/30/17 13:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.021 | | 0.016 | 0.0070 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Benzene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Bromodichloromethane | <0.0016 | | 0.0016 | 0.00033 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Bromoform | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Bromomethane | <0.0040 | | 0.0040 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 2-Butanone (MEK) | <0.0040 | | 0.0040 | 0.0018 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Carbon disulfide | <0.0040 | | 0.0040 | 0.00084 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Carbon tetrachloride | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Chlorobenzene | <0.0016 | | 0.0016 | 0.00059 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Chloroethane | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Chloroform | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Chloromethane | <0.0040 | | 0.0040 | 0.0016 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| cis-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00045 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| cis-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Dibromochloromethane | <0.0016 | | 0.0016 | 0.00053 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,1-Dichloroethane | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,2-Dichloroethane | <0.0040 | | 0.0040 | 0.0013 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,1-Dichloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,2-Dichloropropane | <0.0016 | | 0.0016 | 0.00042 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,3-Dichloropropane, Total | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Ethylbenzene | <0.0016 | | 0.0016 | 0.00077 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 2-Hexanone | <0.0040 | | 0.0040 | 0.0013 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Methylene Chloride | <0.0040 | | 0.0040 | 0.0016 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Methyl tert-butyl ether | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Styrene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0016 | | 0.0016 | 0.00051 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Tetrachloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Toluene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| trans-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00071 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| trans-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,1,1-Trichloroethane | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,1,2-Trichloroethane | <0.0016 | | 0.0016 | 0.00069 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Trichloroethene | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Vinyl acetate | <0.0040 | | 0.0040 | 0.0014 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Vinyl chloride | <0.0016 | | 0.0016 | 0.00071 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Xylenes, Total | <0.0032 | | 0.0032 | 0.00051 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 16:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 10/31/17 15:36 | 11/02/17 16:54 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 10/31/17 15:36 | 11/02/17 16:54 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Anthracene | 0.0084 | J | 0.038 | 0.0063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Benzo[a]anthracene | 0.049 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-3 (0-4')

Lab Sample ID: 500-136509-2

Date Collected: 10/30/17 13:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.052 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Benzo[b]fluoranthene | 0.087 | | 0.038 | 0.0082 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Benzo[g,h,i]perylene | 0.037 | J | 0.038 | 0.012 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Benzo[k]fluoranthene | 0.025 | J | 0.038 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 4-Chloroaniline | <0.76 | | 0.76 | 0.18 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Chrysene | 0.073 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.76 | | 0.76 | 0.30 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4-Dinitrophenol | <0.76 | | 0.76 | 0.67 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Fluoranthene | 0.077 | | 0.038 | 0.0070 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Hexachlorobenzene | <0.076 | | 0.076 | 0.0088 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Hexachlorocyclopentadiene | <0.76 | | 0.76 | 0.22 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.027 | J | 0.038 | 0.0098 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Methylnaphthalene | 0.042 | J | 0.076 | 0.0070 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Naphthalene | 0.023 | J | 0.038 | 0.0058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-3 (0-4')

Lab Sample ID: 500-136509-2

Date Collected: 10/30/17 13:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.76 | | 0.76 | 0.36 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| N-Nitrosodi-n-propylamine | <0.076 | | 0.076 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Pentachlorophenol | <0.76 | | 0.76 | 0.61 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Phenanthrene | 0.070 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Pyrene | 0.069 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.086 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 87 | | 44 - 121 | | | | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2-Fluorophenol | 87 | | 46 - 133 | | | | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Nitrobenzene-d5 | 69 | | 41 - 120 | | | | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Phenol-d5 | 66 | | 46 - 125 | | | | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| Terphenyl-d14 | 85 | | 35 - 160 | | | | 11/06/17 15:06 | 11/07/17 15:38 | 1 |
| 2,4,6-Tribromophenol | 100 | | 25 - 139 | | | | 11/06/17 15:06 | 11/07/17 15:38 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.019 | | 0.019 | 0.0068 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| PCB-1221 | <0.019 | | 0.019 | 0.0085 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| PCB-1232 | <0.019 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| PCB-1242 | <0.019 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| PCB-1248 | <0.019 | | 0.019 | 0.0076 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| PCB-1254 | <0.019 | | 0.019 | 0.0042 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| PCB-1260 | <0.019 | | 0.019 | 0.0095 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| Tetrachloro-m-xylene | 98 | | 49 - 129 | | | | 11/03/17 07:23 | 11/08/17 02:27 | 1 |
| DCB Decachlorobiphenyl | 96 | | 37 - 121 | | | | 11/03/17 07:23 | 11/08/17 02:27 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.48 | J | 1.2 | 0.23 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Arsenic | 6.6 | | 0.58 | 0.20 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Barium | 93 | | 0.58 | 0.066 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Beryllium | 0.45 | | 0.23 | 0.054 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Cadmium | 0.37 | B | 0.12 | 0.021 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Chromium | 16 | | 0.58 | 0.29 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Cobalt | 7.3 | | 0.29 | 0.076 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Copper | 16 | B | 0.58 | 0.16 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Iron | 15000 | | 11 | 5.8 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 19:17 | 1 |
| Lead | 46 | | 0.29 | 0.13 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Manganese | 210 | B | 0.58 | 0.084 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Nickel | 14 | | 0.58 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Selenium | <0.58 | | 0.58 | 0.34 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Silver | <0.29 | | 0.29 | 0.075 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-3 (0-4')

Lab Sample ID: 500-136509-2

Date Collected: 10/30/17 13:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.58 | | 0.58 | 0.29 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Vanadium | 26 | | 0.29 | 0.069 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |
| Zinc | 96 | | 1.2 | 0.51 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:24 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Barium | 0.67 | | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Cadmium | 0.0020 | J | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Manganese | 0.030 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:42 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/02/17 08:35 | 11/02/17 17:13 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 17:13 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:34 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.049 | | 0.017 | 0.0057 | mg/Kg | ☼ | 11/01/17 15:30 | 11/02/17 12:29 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|-----|-----|------|---|----------|----------------|---------|
| pH | 7.6 | HF | 0.2 | 0.2 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Acetone | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Benzene | 0.65 | | 0.021 | 0.012 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Bromodichloromethane | <0.083 | | 0.083 | 0.031 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Bromoform | <0.083 | | 0.083 | 0.040 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Bromomethane | <0.17 | | 0.17 | 0.066 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 2-Butanone (MEK) | <0.41 | | 0.41 | 0.18 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Carbon disulfide | <0.17 | | 0.17 | 0.066 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Carbon tetrachloride | <0.083 | | 0.083 | 0.032 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Chlorobenzene | <0.083 | | 0.083 | 0.032 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Chloroethane | <0.083 | | 0.083 | 0.042 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Chloroform | <0.17 | | 0.17 | 0.031 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Chloromethane | <0.083 | | 0.083 | 0.027 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| cis-1,2-Dichloroethene | <0.083 | | 0.083 | 0.034 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| cis-1,3-Dichloropropene | <0.083 | | 0.083 | 0.034 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Dibromochloromethane | <0.083 | | 0.083 | 0.040 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,1-Dichloroethane | <0.083 | | 0.083 | 0.034 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,2-Dichloroethane | <0.083 | | 0.083 | 0.032 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,1-Dichloroethene | <0.083 | | 0.083 | 0.032 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,2-Dichloropropane | <0.083 | | 0.083 | 0.035 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,3-Dichloropropene, Total | <0.083 | | 0.083 | 0.034 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Ethylbenzene | 0.52 | | 0.021 | 0.015 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 2-Hexanone | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Methylene Chloride | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 4-Methyl-2-pentanone (MIBK) | <0.41 | | 0.41 | 0.18 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Methyl tert-butyl ether | <0.083 | | 0.083 | 0.033 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Styrene | <0.083 | | 0.083 | 0.032 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,1,2,2-Tetrachloroethane | <0.083 | | 0.083 | 0.033 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Tetrachloroethene | <0.083 | | 0.083 | 0.031 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Toluene | 0.22 | | 0.021 | 0.012 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| trans-1,2-Dichloroethene | <0.083 | | 0.083 | 0.029 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| trans-1,3-Dichloropropene | <0.083 | | 0.083 | 0.030 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,1,1-Trichloroethane | <0.083 | | 0.083 | 0.031 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,1,2-Trichloroethane | <0.083 | | 0.083 | 0.029 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Trichloroethene | 0.022 | J | 0.041 | 0.014 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Vinyl acetate | <0.17 | | 0.17 | 0.075 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Vinyl chloride | <0.041 | | 0.041 | 0.022 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Xylenes, Total | 2.6 | | 0.041 | 0.018 | mg/Kg | ☼ | 10/30/17 13:35 | 11/09/17 17:46 | 50 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 84 | | 72 - 124 | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Dibromofluoromethane | 88 | | 75 - 120 | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| 1,2-Dichloroethane-d4 (Surr) | 87 | | 75 - 126 | 10/30/17 13:35 | 11/09/17 17:46 | 50 |
| Toluene-d8 (Surr) | 103 | | 75 - 120 | 10/30/17 13:35 | 11/09/17 17:46 | 50 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Benzo[a]anthracene | 0.0086 | J | 0.040 | 0.0054 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0087 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4-Dimethylphenol | 0.21 | J | 0.40 | 0.15 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Fluoranthene | 0.019 | J | 0.040 | 0.0075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Fluorene | 0.0096 | J | 0.040 | 0.0057 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0094 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Methylnaphthalene | 0.63 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Naphthalene | 0.37 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.65 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Phenanthrene | 0.023 | J | 0.040 | 0.0056 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Pyrene | 0.018 | J | 0.040 | 0.0080 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 85 | | 44 - 121 | | | | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2-Fluorophenol | 91 | | 46 - 133 | | | | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Nitrobenzene-d5 | 72 | | 41 - 120 | | | | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Phenol-d5 | 77 | | 46 - 125 | | | | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| Terphenyl-d14 | 91 | | 35 - 160 | | | | 11/06/17 15:06 | 11/07/17 13:24 | 1 |
| 2,4,6-Tribromophenol | 117 | | 25 - 139 | | | | 11/06/17 15:06 | 11/07/17 13:24 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.48 | J | 1.2 | 0.23 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Arsenic | 7.8 | | 0.59 | 0.20 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Barium | 84 | | 0.59 | 0.067 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Beryllium | 0.38 | | 0.24 | 0.055 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Cadmium | <0.12 | | 0.12 | 0.021 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Chromium | 17 | | 0.59 | 0.29 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Cobalt | 6.8 | | 0.30 | 0.078 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Copper | 16 | B | 0.59 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Iron | 18000 | | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 19:21 | 1 |
| Lead | 14 | | 0.30 | 0.14 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Manganese | 210 | B | 0.59 | 0.086 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Nickel | 14 | | 0.59 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Selenium | <0.59 | | 0.59 | 0.35 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Silver | <0.30 | | 0.30 | 0.076 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Thallium | <0.59 | | 0.59 | 0.30 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Vanadium | 30 | | 0.30 | 0.070 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |
| Zinc | 56 | | 1.2 | 0.52 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:28 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Barium | 0.66 | | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Copper | 0.020 | J | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Iron | 3.0 | | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:46 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 80.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Manganese | 3.0 | | 0.025 | 0.010 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |
| Zinc | 0.035 | J | 0.50 | 0.020 | mg/L | - | 11/02/17 08:35 | 11/02/17 16:46 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.34 | | 0.025 | 0.010 | mg/L | - | 11/02/17 14:21 | 11/03/17 23:04 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/02/17 08:35 | 11/02/17 17:16 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/02/17 08:35 | 11/02/17 17:16 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/03/17 12:20 | 11/06/17 09:38 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.020 | | 0.018 | 0.0061 | mg/Kg | ☼ | 11/01/17 15:30 | 11/02/17 12:31 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|-----|-----|------|---|----------|----------------|---------|
| pH | 5.4 | HF | 0.2 | 0.2 | SU | - | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

Date Collected: 10/30/17 13:50

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00088 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00088 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 10/31/17 15:36 | 11/02/17 17:19 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 10/31/17 15:36 | 11/02/17 17:19 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Benzo[a]anthracene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

Date Collected: 10/30/17 13:50

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.038 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Benzo[b]fluoranthene | <0.038 | | 0.038 | 0.0082 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 4-Chloroaniline | <0.76 | | 0.76 | 0.18 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.76 | | 0.76 | 0.30 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4-Dinitrophenol | <0.76 | | 0.76 | 0.67 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Fluoranthene | <0.038 | | 0.038 | 0.0070 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Hexachlorobenzene | <0.076 | | 0.076 | 0.0088 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Hexachlorocyclopentadiene | <0.76 | | 0.76 | 0.22 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.0098 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Methylnaphthalene | <0.076 | | 0.076 | 0.0070 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0058 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

Date Collected: 10/30/17 13:50

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.76 | | 0.76 | 0.36 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| N-Nitrosodi-n-propylamine | <0.076 | | 0.076 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Pentachlorophenol | <0.76 | | 0.76 | 0.61 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Phenanthrene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Pyrene | <0.038 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.086 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 13:51 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 83 | | 44 - 121 | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2-Fluorophenol | 92 | | 46 - 133 | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Nitrobenzene-d5 | 69 | | 41 - 120 | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Phenol-d5 | 64 | | 46 - 125 | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| Terphenyl-d14 | 98 | | 35 - 160 | 11/06/17 15:06 | 11/07/17 13:51 | 1 |
| 2,4,6-Tribromophenol | 116 | | 25 - 139 | 11/06/17 15:06 | 11/07/17 13:51 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.27 | J | 1.1 | 0.22 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Arsenic | 7.7 | | 0.57 | 0.20 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Barium | 130 | | 0.57 | 0.065 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Beryllium | 0.35 | | 0.23 | 0.053 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.021 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Chromium | 20 | | 0.57 | 0.28 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Cobalt | 6.0 | | 0.29 | 0.075 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Copper | 18 | B | 0.57 | 0.16 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Iron | 20000 | | 9.9 | 5.2 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 19:25 | 1 |
| Lead | 12 | | 0.29 | 0.13 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Manganese | 210 | B | 0.57 | 0.083 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Nickel | 13 | | 0.57 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Selenium | <0.57 | | 0.57 | 0.34 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Vanadium | 33 | | 0.29 | 0.067 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |
| Zinc | 53 | | 1.1 | 0.50 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:32 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Barium | 0.096 | J | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Copper | 0.081 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Iron | 0.21 | J | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

Date Collected: 10/30/17 13:50

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Manganese | 0.066 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |
| Zinc | 0.081 | J | 0.50 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:50 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/02/17 08:35 | 11/02/17 17:20 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 17:20 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:40 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.018 | | 0.018 | 0.0061 | mg/Kg | ☼ | 11/01/17 15:30 | 11/02/17 12:37 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|-----|-----|------|---|----------|----------------|---------|
| pH | 4.8 | HF | 0.2 | 0.2 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

Date Collected: 10/30/17 14:00

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.021 | | 0.019 | 0.0082 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00098 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00090 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00081 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00060 | mg/Kg | ☼ | 10/31/17 15:36 | 11/02/17 17:44 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 10/31/17 15:36 | 11/02/17 17:44 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 10/31/17 15:36 | 11/02/17 17:44 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Benzo[a]anthracene | <0.039 | | 0.039 | 0.0053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

Date Collected: 10/30/17 14:00

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0085 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0056 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Methylnaphthalene | <0.080 | | 0.080 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0099 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

Date Collected: 10/30/17 14:00

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.63 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Phenanthrene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0078 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 81 | | 44 - 121 | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2-Fluorophenol | 91 | | 46 - 133 | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Nitrobenzene-d5 | 71 | | 41 - 120 | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Phenol-d5 | 67 | | 46 - 125 | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| Terphenyl-d14 | 64 | | 35 - 160 | 11/06/17 15:06 | 11/07/17 14:18 | 1 |
| 2,4,6-Tribromophenol | 112 | | 25 - 139 | 11/06/17 15:06 | 11/07/17 14:18 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.019 | | 0.019 | 0.0069 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| PCB-1221 | <0.019 | | 0.019 | 0.0085 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| PCB-1232 | <0.019 | | 0.019 | 0.0085 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| PCB-1242 | <0.019 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| PCB-1248 | <0.019 | | 0.019 | 0.0076 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| PCB-1254 | <0.019 | | 0.019 | 0.0042 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| PCB-1260 | <0.019 | | 0.019 | 0.0095 | mg/Kg | ☼ | 11/03/17 07:23 | 11/08/17 02:42 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 85 | | 49 - 129 | 11/03/17 07:23 | 11/08/17 02:42 | 1 |
| DCB Decachlorobiphenyl | 92 | | 37 - 121 | 11/03/17 07:23 | 11/08/17 02:42 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.32 | J | 1.2 | 0.23 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Arsenic | 6.2 | | 0.60 | 0.20 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Barium | 78 | | 0.60 | 0.068 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Beryllium | 0.27 | | 0.24 | 0.056 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Cadmium | <0.12 | | 0.12 | 0.021 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Chromium | 16 | | 0.60 | 0.29 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Cobalt | 4.8 | | 0.30 | 0.078 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Copper | 13 | B | 0.60 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Iron | 16000 | | 11 | 5.5 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 19:29 | 1 |
| Lead | 9.6 | | 0.30 | 0.14 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Manganese | 150 | B | 0.60 | 0.086 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Nickel | 9.5 | | 0.60 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Selenium | <0.60 | | 0.60 | 0.35 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Silver | <0.30 | | 0.30 | 0.077 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

Date Collected: 10/30/17 14:00

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.2

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.60 | | 0.60 | 0.30 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Vanadium | 30 | | 0.30 | 0.070 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |
| Zinc | 31 | | 1.2 | 0.52 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:36 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Barium | 0.48 | J | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Copper | 0.031 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Manganese | 0.28 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |
| Zinc | 0.078 | J | 0.50 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:54 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.21 | | 0.025 | 0.010 | mg/L | | 11/02/17 14:21 | 11/03/17 23:12 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/02/17 08:35 | 11/02/17 17:23 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 17:23 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:41 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.011 | J | 0.018 | 0.0059 | mg/Kg | ☼ | 11/01/17 15:30 | 11/02/17 12:40 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|-----|-----|------|---|----------|----------------|---------|
| pH | 4.6 | HF | 0.2 | 0.2 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acetone | <0.31 | | 0.31 | 0.11 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Benzene | <0.016 | | 0.016 | 0.0091 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Bromodichloromethane | <0.062 | | 0.062 | 0.023 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Bromoform | <0.062 | | 0.062 | 0.030 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Bromomethane | <0.12 | | 0.12 | 0.050 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 2-Butanone (MEK) | <0.31 | | 0.31 | 0.13 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Carbon disulfide | <0.12 | | 0.12 | 0.050 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Carbon tetrachloride | <0.062 | | 0.062 | 0.024 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Chlorobenzene | <0.062 | | 0.062 | 0.024 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Chloroethane | <0.062 | | 0.062 | 0.031 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Chloroform | <0.12 | | 0.12 | 0.023 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Chloromethane | <0.062 | | 0.062 | 0.020 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| cis-1,2-Dichloroethene | <0.062 | | 0.062 | 0.025 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| cis-1,3-Dichloropropene | <0.062 | | 0.062 | 0.026 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Dibromochloromethane | <0.062 | | 0.062 | 0.030 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,1-Dichloroethane | <0.062 | | 0.062 | 0.026 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,2-Dichloroethane | <0.062 | | 0.062 | 0.024 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,1-Dichloroethene | <0.062 | | 0.062 | 0.024 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,2-Dichloropropane | <0.062 | | 0.062 | 0.027 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,3-Dichloropropene, Total | <0.062 | | 0.062 | 0.026 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Ethylbenzene | <0.016 | | 0.016 | 0.011 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 2-Hexanone | <0.31 | | 0.31 | 0.097 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Methylene Chloride | <0.31 | | 0.31 | 0.10 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 4-Methyl-2-pentanone (MIBK) | <0.31 | | 0.31 | 0.13 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Methyl tert-butyl ether | <0.062 | | 0.062 | 0.025 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Styrene | <0.062 | | 0.062 | 0.024 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,1,2,2-Tetrachloroethane | <0.062 | | 0.062 | 0.025 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Tetrachloroethene | <0.062 | | 0.062 | 0.023 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Toluene | <0.016 | | 0.016 | 0.0092 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| trans-1,2-Dichloroethene | <0.062 | | 0.062 | 0.022 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| trans-1,3-Dichloropropene | <0.062 | | 0.062 | 0.023 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,1,1-Trichloroethane | <0.062 | | 0.062 | 0.024 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,1,2-Trichloroethane | <0.062 | | 0.062 | 0.022 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Trichloroethene | <0.031 | | 0.031 | 0.010 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Vinyl acetate | <0.12 | | 0.12 | 0.056 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Vinyl chloride | <0.031 | | 0.031 | 0.016 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Xylenes, Total | <0.031 | | 0.031 | 0.014 | mg/Kg | ☼ | 10/30/17 14:20 | 11/09/17 18:12 | 50 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 72 - 124 | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Dibromofluoromethane | 88 | | 75 - 120 | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| 1,2-Dichloroethane-d4 (Surr) | 88 | | 75 - 126 | 10/30/17 14:20 | 11/09/17 18:12 | 50 |
| Toluene-d8 (Surr) | 103 | | 75 - 120 | 10/30/17 14:20 | 11/09/17 18:12 | 50 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0073 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Anthracene | <0.041 | | 0.041 | 0.0068 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Benzo[a]anthracene | <0.041 | | 0.041 | 0.0055 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Benzo[b]fluoranthene | <0.041 | | 0.041 | 0.0088 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.061 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.078 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Chrysene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.052 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.057 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.15 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.72 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.080 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Fluoranthene | <0.041 | | 0.041 | 0.0076 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0057 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0095 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.23 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Methylnaphthalene | <0.082 | | 0.082 | 0.0075 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Naphthalene | <0.041 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.66 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Phenanthrene | 0.0064 | J | 0.041 | 0.0057 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Phenol | <0.21 | | 0.21 | 0.091 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Pyrene | <0.041 | | 0.041 | 0.0081 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.093 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 81 | | 44 - 121 | | | | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2-Fluorophenol | 88 | | 46 - 133 | | | | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Nitrobenzene-d5 | 70 | | 41 - 120 | | | | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Phenol-d5 | 65 | | 46 - 125 | | | | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| Terphenyl-d14 | 93 | | 35 - 160 | | | | 11/06/17 15:06 | 11/07/17 14:45 | 1 |
| 2,4,6-Tribromophenol | 112 | | 25 - 139 | | | | 11/06/17 15:06 | 11/07/17 14:45 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.30 | J | 1.2 | 0.23 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Arsenic | 9.2 | | 0.58 | 0.20 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Barium | 110 | | 0.58 | 0.066 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Beryllium | 0.42 | | 0.23 | 0.054 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Cadmium | 0.022 | J B | 0.12 | 0.021 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Chromium | 21 | | 0.58 | 0.29 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Cobalt | 8.3 | | 0.29 | 0.076 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Copper | 16 | B | 0.58 | 0.16 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Iron | 19000 | | 13 | 6.5 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 19:33 | 1 |
| Lead | 16 | | 0.29 | 0.13 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Manganese | 250 | B | 0.58 | 0.084 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Nickel | 13 | | 0.58 | 0.17 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Selenium | <0.58 | | 0.58 | 0.34 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Silver | <0.29 | | 0.29 | 0.075 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Thallium | <0.58 | | 0.58 | 0.29 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Vanadium | 35 | | 0.29 | 0.068 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |
| Zinc | 64 | | 1.2 | 0.51 | mg/Kg | ☼ | 10/31/17 16:37 | 11/01/17 14:40 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Barium | 1.4 | | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Cadmium | 0.0022 | J | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Cobalt | 0.026 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Copper | 0.042 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Iron | 7.6 | | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Manganese | 4.1 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Nickel | 0.019 | J | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |
| Zinc | 0.14 | J | 0.50 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:58 | 1 |

Method: 6010B - SPLP Metals - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Iron | 88 | | 0.20 | 0.20 | mg/L | | 11/02/17 14:21 | 11/03/17 23:16 | 1 |
| Manganese | 0.61 | | 0.025 | 0.010 | mg/L | | 11/02/17 14:21 | 11/03/17 23:16 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/02/17 08:35 | 11/02/17 17:27 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 17:27 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:43 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.024 | | 0.021 | 0.0068 | mg/Kg | ☼ | 11/01/17 15:30 | 11/02/17 12:42 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|-----|-----|------|---|----------|----------------|---------|
| pH | 8.2 | HF | 0.2 | 0.2 | SU | | | 11/03/17 08:57 | 1 |

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Qualifiers

GC/MS VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Metals

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| B | Compound was found in the blank and sample. |
| F5 | Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |

General Chemistry

| Qualifier | Qualifier Description |
|-----------|--|
| HF | Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

GC/MS VOA

Prep Batch: 408047

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 5035 | |

Analysis Batch: 408093

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 8260B | 408124 |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 8260B | 408124 |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 8260B | 408124 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 8260B | 408124 |
| MB 500-408093/8 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408093/5 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCS 500-408093/6 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

Prep Batch: 408124

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 5035 | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 5035 | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 5035 | |

Analysis Batch: 409141

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 8260B | 408047 |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 8260B | 408047 |
| MB 500-409141/6 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-409141/4 | Lab Control Sample | Total/NA | Solid | 8260B | |

GC/MS Semi VOA

Prep Batch: 408658

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 3541 | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 3541 | |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 3541 | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 3541 | |
| MB 500-408658/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408658/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Analysis Batch: 408747

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 500-408658/1-A | Method Blank | Total/NA | Solid | 8270D | 408658 |
| LCS 500-408658/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 408658 |

Analysis Batch: 408758

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 8270D | 408658 |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 8270D | 408658 |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 8270D | 408658 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

GC/MS Semi VOA (Continued)

Analysis Batch: 408758 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 8270D | 408658 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 8270D | 408658 |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 8270D | 408658 |

GC Semi VOA

Prep Batch: 408289

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 3541 | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 3541 | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 3541 | |
| MB 500-408289/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408289/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Analysis Batch: 408791

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 8082A | 408289 |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 8082A | 408289 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 8082A | 408289 |
| MB 500-408289/1-A | Method Blank | Total/NA | Solid | 8082A | 408289 |
| LCS 500-408289/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 408289 |

Metals

Prep Batch: 407860

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 3050B | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 3050B | |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 3050B | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 3050B | |
| MB 500-407860/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-407860/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |

Leach Batch: 407959

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | TCLP | Solid | 1311 | |
| 500-136509-2 | 3160-9-3 (0-4') | TCLP | Solid | 1311 | |
| 500-136509-3 | 3160-10-1 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136509-4 | 3160-10-2 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136509-5 | 3160-9-1 (0-4.0') | TCLP | Solid | 1311 | |
| 500-136509-6 | 3160-10-3 (0-2.5') | TCLP | Solid | 1311 | |
| LB 500-407959/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 500-407959/1-D | Method Blank | TCLP | Solid | 1311 | |
| 500-136509-1 MS | 3160-9-2 (0-4') | TCLP | Solid | 1311 | |
| 500-136509-1 DU | 3160-9-2 (0-4') | TCLP | Solid | 1311 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Metals (Continued)

Leach Batch: 407967

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-3 | 3160-10-1 (0-2.5') | SPLP East | Solid | 1312 | |
| 500-136509-5 | 3160-9-1 (0-4.0') | SPLP East | Solid | 1312 | |
| 500-136509-6 | 3160-10-3 (0-2.5') | SPLP East | Solid | 1312 | |
| LB 500-407967/1-B | Method Blank | SPLP East | Solid | 1312 | |
| 500-136509-6 MS | 3160-10-3 (0-2.5') | SPLP East | Solid | 1312 | |
| 500-136509-6 DU | 3160-10-3 (0-2.5') | SPLP East | Solid | 1312 | |

Prep Batch: 407976

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 7471B | |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 7471B | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 7471B | |
| MB 500-407976/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-407976/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-136509-1 MS | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | |
| 500-136509-1 MSD | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | |
| 500-136509-1 DU | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | |

Analysis Batch: 408000

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 6010B | 407860 |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 6010B | 407860 |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 6010B | 407860 |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 6010B | 407860 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 6010B | 407860 |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 6010B | 407860 |
| MB 500-407860/1-A | Method Blank | Total/NA | Solid | 6010B | 407860 |
| LCS 500-407860/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 407860 |

Prep Batch: 408066

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 3050B | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 3050B | |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 3050B | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 3050B | |
| MB 500-408066/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408066/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |

Prep Batch: 408096

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | TCLP | Solid | 3010A | 407959 |
| 500-136509-2 | 3160-9-3 (0-4') | TCLP | Solid | 3010A | 407959 |
| 500-136509-3 | 3160-10-1 (0-2.5') | TCLP | Solid | 3010A | 407959 |
| 500-136509-4 | 3160-10-2 (0-2.5') | TCLP | Solid | 3010A | 407959 |
| 500-136509-5 | 3160-9-1 (0-4.0') | TCLP | Solid | 3010A | 407959 |
| 500-136509-6 | 3160-10-3 (0-2.5') | TCLP | Solid | 3010A | 407959 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Metals (Continued)

Prep Batch: 408096 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LB 500-407959/1-B | Method Blank | TCLP | Solid | 3010A | 407959 |
| LCS 500-408096/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Analysis Batch: 408181

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 7471B | 407976 |
| MB 500-407976/12-A | Method Blank | Total/NA | Solid | 7471B | 407976 |
| LCS 500-407976/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 407976 |
| 500-136509-1 MS | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-1 MSD | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | 407976 |
| 500-136509-1 DU | 3160-9-2 (0-4') | Total/NA | Solid | 7471B | 407976 |

Prep Batch: 408219

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-3 | 3160-10-1 (0-2.5') | SPLP East | Solid | 3010A | 407967 |
| 500-136509-5 | 3160-9-1 (0-4.0') | SPLP East | Solid | 3010A | 407967 |
| 500-136509-6 | 3160-10-3 (0-2.5') | SPLP East | Solid | 3010A | 407967 |
| LB 500-407967/1-B | Method Blank | SPLP East | Solid | 3010A | 407967 |
| LCS 500-408219/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| 500-136509-6 MS | 3160-10-3 (0-2.5') | SPLP East | Solid | 3010A | 407967 |
| 500-136509-6 DU | 3160-10-3 (0-2.5') | SPLP East | Solid | 3010A | 407967 |

Analysis Batch: 408311

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | TCLP | Solid | 6010B | 408096 |
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 6010B | 408066 |
| 500-136509-2 | 3160-9-3 (0-4') | TCLP | Solid | 6010B | 408096 |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 6010B | 408066 |
| 500-136509-3 | 3160-10-1 (0-2.5') | TCLP | Solid | 6010B | 408096 |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 6010B | 408066 |
| 500-136509-4 | 3160-10-2 (0-2.5') | TCLP | Solid | 6010B | 408096 |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 6010B | 408066 |
| 500-136509-5 | 3160-9-1 (0-4.0') | TCLP | Solid | 6010B | 408096 |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 6010B | 408066 |
| 500-136509-6 | 3160-10-3 (0-2.5') | TCLP | Solid | 6010B | 408096 |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 6010B | 408066 |
| LB 500-407959/1-B | Method Blank | TCLP | Solid | 6010B | 408096 |
| MB 500-408066/1-A | Method Blank | Total/NA | Solid | 6010B | 408066 |
| LCS 500-408066/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408066 |
| LCS 500-408096/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408096 |

Analysis Batch: 408313

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | TCLP | Solid | 6020A | 408096 |
| 500-136509-2 | 3160-9-3 (0-4') | TCLP | Solid | 6020A | 408096 |
| 500-136509-3 | 3160-10-1 (0-2.5') | TCLP | Solid | 6020A | 408096 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Metals (Continued)

Analysis Batch: 408313 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-4 | 3160-10-2 (0-2.5') | TCLP | Solid | 6020A | 408096 |
| 500-136509-5 | 3160-9-1 (0-4.0') | TCLP | Solid | 6020A | 408096 |
| 500-136509-6 | 3160-10-3 (0-2.5') | TCLP | Solid | 6020A | 408096 |
| LB 500-407959/1-B | Method Blank | TCLP | Solid | 6020A | 408096 |
| LCS 500-408096/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 408096 |

Prep Batch: 408351

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | TCLP | Solid | 7470A | 407959 |
| 500-136509-2 | 3160-9-3 (0-4') | TCLP | Solid | 7470A | 407959 |
| 500-136509-3 | 3160-10-1 (0-2.5') | TCLP | Solid | 7470A | 407959 |
| 500-136509-4 | 3160-10-2 (0-2.5') | TCLP | Solid | 7470A | 407959 |
| 500-136509-5 | 3160-9-1 (0-4.0') | TCLP | Solid | 7470A | 407959 |
| 500-136509-6 | 3160-10-3 (0-2.5') | TCLP | Solid | 7470A | 407959 |
| LB 500-407959/1-D | Method Blank | TCLP | Solid | 7470A | 407959 |
| MB 500-408351/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-408351/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-136509-1 MS | 3160-9-2 (0-4') | TCLP | Solid | 7470A | 407959 |
| 500-136509-1 DU | 3160-9-2 (0-4') | TCLP | Solid | 7470A | 407959 |

Analysis Batch: 408480

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-3 | 3160-10-1 (0-2.5') | SPLP East | Solid | 6010B | 408219 |
| 500-136509-5 | 3160-9-1 (0-4.0') | SPLP East | Solid | 6010B | 408219 |
| 500-136509-6 | 3160-10-3 (0-2.5') | SPLP East | Solid | 6010B | 408219 |
| LB 500-407967/1-B | Method Blank | SPLP East | Solid | 6010B | 408219 |
| LCS 500-408219/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408219 |
| 500-136509-6 MS | 3160-10-3 (0-2.5') | SPLP East | Solid | 6010B | 408219 |
| 500-136509-6 DU | 3160-10-3 (0-2.5') | SPLP East | Solid | 6010B | 408219 |

Analysis Batch: 408624

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | TCLP | Solid | 7470A | 408351 |
| 500-136509-2 | 3160-9-3 (0-4') | TCLP | Solid | 7470A | 408351 |
| 500-136509-3 | 3160-10-1 (0-2.5') | TCLP | Solid | 7470A | 408351 |
| 500-136509-4 | 3160-10-2 (0-2.5') | TCLP | Solid | 7470A | 408351 |
| 500-136509-5 | 3160-9-1 (0-4.0') | TCLP | Solid | 7470A | 408351 |
| 500-136509-6 | 3160-10-3 (0-2.5') | TCLP | Solid | 7470A | 408351 |
| LB 500-407959/1-D | Method Blank | TCLP | Solid | 7470A | 408351 |
| MB 500-408351/12-A | Method Blank | Total/NA | Solid | 7470A | 408351 |
| LCS 500-408351/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 408351 |
| 500-136509-1 MS | 3160-9-2 (0-4') | TCLP | Solid | 7470A | 408351 |
| 500-136509-1 DU | 3160-9-2 (0-4') | TCLP | Solid | 7470A | 408351 |

General Chemistry

Analysis Batch: 407791

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | Moisture | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | Moisture | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

General Chemistry (Continued)

Analysis Batch: 407791 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|--------------------|-----------|--------|----------|------------|
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | Moisture | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136509-1 DU | 3160-9-2 (0-4') | Total/NA | Solid | Moisture | |

Analysis Batch: 408326

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136509-1 | 3160-9-2 (0-4') | Total/NA | Solid | 9045D | |
| 500-136509-2 | 3160-9-3 (0-4') | Total/NA | Solid | 9045D | |
| 500-136509-3 | 3160-10-1 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136509-4 | 3160-10-2 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136509-5 | 3160-9-1 (0-4.0') | Total/NA | Solid | 9045D | |
| 500-136509-6 | 3160-10-3 (0-2.5') | Total/NA | Solid | 9045D | |

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | BFB | DBFM | 12DCE | TOL |
|-------------------|------------------------|----------|----------|----------|----------|
| | | (75-131) | (75-126) | (70-134) | (75-124) |
| 500-136509-1 | 3160-9-2 (0-4') | 92 | 99 | 94 | 96 |
| 500-136509-2 | 3160-9-3 (0-4') | 90 | 101 | 96 | 98 |
| 500-136509-4 | 3160-10-2 (0-2.5') | 92 | 101 | 96 | 98 |
| 500-136509-5 | 3160-9-1 (0-4.0') | 93 | 101 | 98 | 95 |
| LCS 500-408093/5 | Lab Control Sample | 93 | 100 | 90 | 99 |
| LCSD 500-408093/6 | Lab Control Sample Dup | 93 | 98 | 92 | 98 |
| MB 500-408093/8 | Method Blank | 91 | 99 | 92 | 96 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | BFB | DBFM | 12DCE | TOL |
|------------------|--------------------|----------|----------|----------|----------|
| | | (72-124) | (75-120) | (75-126) | (75-120) |
| 500-136509-3 | 3160-10-1 (0-2.5') | 84 | 88 | 87 | 103 |
| 500-136509-6 | 3160-10-3 (0-2.5') | 87 | 88 | 88 | 103 |
| LCS 500-409141/4 | Lab Control Sample | 83 | 88 | 88 | 104 |
| MB 500-409141/6 | Method Blank | 88 | 90 | 92 | 104 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | FBP | 2FP | NBZ | PHL | TPH | TBP |
|--------------------|--------------------|----------|----------|----------|----------|----------|----------|
| | | (44-121) | (46-133) | (41-120) | (46-125) | (35-160) | (25-139) |
| 500-136509-1 | 3160-9-2 (0-4') | 84 | 88 | 73 | 75 | 104 | 104 |
| 500-136509-2 | 3160-9-3 (0-4') | 87 | 87 | 69 | 66 | 85 | 100 |
| 500-136509-3 | 3160-10-1 (0-2.5') | 85 | 91 | 72 | 77 | 91 | 117 |
| 500-136509-4 | 3160-10-2 (0-2.5') | 83 | 92 | 69 | 64 | 98 | 116 |
| 500-136509-5 | 3160-9-1 (0-4.0') | 81 | 91 | 71 | 67 | 64 | 112 |
| 500-136509-6 | 3160-10-3 (0-2.5') | 81 | 88 | 70 | 65 | 93 | 112 |
| LCS 500-408658/2-A | Lab Control Sample | 68 | 72 | 69 | 76 | 76 | 76 |
| MB 500-408658/1-A | Method Blank | 80 | 86 | 73 | 80 | 81 | 74 |

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5

TestAmerica Chicago

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | TCX1 | DCB1 |
|--------------------|--------------------|----------|----------|
| | | (49-129) | (37-121) |
| 500-136509-1 | 3160-9-2 (0-4') | 78 | 84 |
| 500-136509-2 | 3160-9-3 (0-4') | 98 | 96 |
| 500-136509-5 | 3160-9-1 (0-4.0') | 85 | 92 |
| LCS 500-408289/2-A | Lab Control Sample | 89 | 96 |
| MB 500-408289/1-A | Method Blank | 94 | 103 |

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408093/8

Matrix: Solid

Analysis Batch: 408093

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/02/17 12:43 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/02/17 12:43 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/02/17 12:43 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/02/17 12:43 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/02/17 12:43 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/02/17 12:43 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/02/17 12:43 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | | 11/02/17 12:43 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | | 11/02/17 12:43 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 70 - 134 | | 11/02/17 12:43 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | | 11/02/17 12:43 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408093/5

Matrix: Solid

Analysis Batch: 408093

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0405 | | mg/Kg | | 81 | 40 - 150 |
| Benzene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0501 | | mg/Kg | | 100 | 67 - 129 |
| Bromoform | 0.0500 | 0.0504 | | mg/Kg | | 101 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0490 | | mg/Kg | | 98 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0422 | | mg/Kg | | 84 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0472 | | mg/Kg | | 94 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0474 | | mg/Kg | | 95 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0406 | | mg/Kg | | 81 | 75 - 125 |
| Chloroform | 0.0500 | 0.0470 | | mg/Kg | | 94 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0498 | | mg/Kg | | 100 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0452 | | mg/Kg | | 90 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0466 | | mg/Kg | | 93 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0480 | | mg/Kg | | 96 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0451 | | mg/Kg | | 90 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0468 | | mg/Kg | | 94 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0447 | | mg/Kg | | 89 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0523 | | mg/Kg | | 105 | 50 - 140 |
| Styrene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 70 - 125 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0570 | | mg/Kg | | 114 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 70 - 124 |
| Toluene | 0.0500 | 0.0472 | | mg/Kg | | 94 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0472 | | mg/Kg | | 94 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0447 | | mg/Kg | | 89 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0591 | | mg/Kg | | 118 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.0918 | | mg/Kg | | 92 | 53 - 147 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 |
| Dibromofluoromethane | 100 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 90 | | 70 - 134 |
| Toluene-d8 (Surr) | 99 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-408093/6
Matrix: Solid
Analysis Batch: 408093

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0424 | | mg/Kg | | 85 | 40 - 150 | 4 | 30 |
| Benzene | 0.0500 | 0.0474 | | mg/Kg | | 95 | 70 - 125 | 1 | 30 |
| Bromodichloromethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 67 - 129 | 2 | 30 |
| Bromoform | 0.0500 | 0.0509 | | mg/Kg | | 102 | 68 - 136 | 1 | 30 |
| Bromomethane | 0.0500 | 0.0467 | | mg/Kg | | 93 | 70 - 130 | 5 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0428 | | mg/Kg | | 86 | 47 - 138 | 1 | 30 |
| Carbon disulfide | 0.0500 | 0.0502 | | mg/Kg | | 100 | 70 - 129 | 0 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0454 | | mg/Kg | | 91 | 75 - 125 | 4 | 30 |
| Chlorobenzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 50 - 150 | 1 | 30 |
| Chloroethane | 0.0500 | 0.0407 | | mg/Kg | | 81 | 75 - 125 | 0 | 30 |
| Chloroform | 0.0500 | 0.0462 | | mg/Kg | | 92 | 57 - 135 | 2 | 30 |
| Chloromethane | 0.0500 | 0.0498 | | mg/Kg | | 100 | 70 - 125 | 0 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 70 - 125 | 3 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 70 - 125 | 1 | 30 |
| Dibromochloromethane | 0.0500 | 0.0529 | | mg/Kg | | 106 | 69 - 125 | 4 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0450 | | mg/Kg | | 90 | 70 - 125 | 1 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0473 | | mg/Kg | | 95 | 70 - 130 | 1 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0474 | | mg/Kg | | 95 | 70 - 120 | 2 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 125 | 1 | 30 |
| Ethylbenzene | 0.0500 | 0.0461 | | mg/Kg | | 92 | 61 - 136 | 1 | 30 |
| 2-Hexanone | 0.0500 | 0.0488 | | mg/Kg | | 98 | 48 - 146 | 8 | 30 |
| Methylene Chloride | 0.0500 | 0.0476 | | mg/Kg | | 95 | 70 - 126 | 2 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0477 | | mg/Kg | | 95 | 50 - 148 | 6 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0536 | | mg/Kg | | 107 | 50 - 140 | 2 | 30 |
| Styrene | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 125 | 0 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0583 | | mg/Kg | | 117 | 70 - 122 | 2 | 30 |
| Tetrachloroethene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 70 - 124 | 2 | 30 |
| Toluene | 0.0500 | 0.0466 | | mg/Kg | | 93 | 70 - 125 | 1 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0461 | | mg/Kg | | 92 | 70 - 125 | 2 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 125 | 0 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 70 - 128 | 4 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 | 2 | 30 |
| Trichloroethene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 125 | 2 | 30 |
| Vinyl acetate | 0.0500 | 0.0606 | | mg/Kg | | 121 | 40 - 153 | 3 | 30 |
| Vinyl chloride | 0.0500 | 0.0509 | | mg/Kg | | 102 | 70 - 125 | 0 | 30 |
| Xylenes, Total | 0.100 | 0.0912 | | mg/Kg | | 91 | 53 - 147 | 1 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 |
| Dibromofluoromethane | 98 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 70 - 134 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-409141/6

Matrix: Solid

Analysis Batch: 409141

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|---------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Benzene | <0.00025 | | 0.00025 | 0.00015 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Bromodichloromethane | <0.0010 | | 0.0010 | 0.00037 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Bromoform | <0.0010 | | 0.0010 | 0.00048 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Bromomethane | <0.0020 | | 0.0020 | 0.00080 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0021 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Carbon disulfide | <0.0020 | | 0.0020 | 0.00080 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Carbon tetrachloride | <0.0010 | | 0.0010 | 0.00038 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Chlorobenzene | <0.0010 | | 0.0010 | 0.00039 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Chloroethane | <0.0010 | | 0.0010 | 0.00050 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00037 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Chloromethane | <0.0010 | | 0.0010 | 0.00032 | mg/Kg | | | 11/09/17 13:16 | 1 |
| cis-1,2-Dichloroethene | <0.0010 | | 0.0010 | 0.00041 | mg/Kg | | | 11/09/17 13:16 | 1 |
| cis-1,3-Dichloropropene | <0.0010 | | 0.0010 | 0.00042 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Dibromochloromethane | <0.0010 | | 0.0010 | 0.00049 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,1-Dichloroethane | <0.0010 | | 0.0010 | 0.00041 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,2-Dichloroethane | <0.0010 | | 0.0010 | 0.00039 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,1-Dichloroethene | <0.0010 | | 0.0010 | 0.00039 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,2-Dichloropropane | <0.0010 | | 0.0010 | 0.00043 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,3-Dichloropropene, Total | <0.0010 | | 0.0010 | 0.00042 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Ethylbenzene | <0.00025 | | 0.00025 | 0.00018 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Methyl tert-butyl ether | <0.0010 | | 0.0010 | 0.00039 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Styrene | <0.0010 | | 0.0010 | 0.00039 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0010 | | 0.0010 | 0.00040 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Tetrachloroethene | <0.0010 | | 0.0010 | 0.00037 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Toluene | <0.00025 | | 0.00025 | 0.00015 | mg/Kg | | | 11/09/17 13:16 | 1 |
| trans-1,2-Dichloroethene | <0.0010 | | 0.0010 | 0.00035 | mg/Kg | | | 11/09/17 13:16 | 1 |
| trans-1,3-Dichloropropene | <0.0010 | | 0.0010 | 0.00036 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,1,1-Trichloroethane | <0.0010 | | 0.0010 | 0.00038 | mg/Kg | | | 11/09/17 13:16 | 1 |
| 1,1,2-Trichloroethane | <0.0010 | | 0.0010 | 0.00035 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Trichloroethene | <0.00050 | | 0.00050 | 0.00016 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Vinyl acetate | <0.0020 | | 0.0020 | 0.00090 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Vinyl chloride | <0.00050 | | 0.00050 | 0.00026 | mg/Kg | | | 11/09/17 13:16 | 1 |
| Xylenes, Total | <0.00050 | | 0.00050 | 0.00022 | mg/Kg | | | 11/09/17 13:16 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 72 - 124 | | 11/09/17 13:16 | 1 |
| Dibromofluoromethane | 90 | | 75 - 120 | | 11/09/17 13:16 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 75 - 126 | | 11/09/17 13:16 | 1 |
| Toluene-d8 (Surr) | 104 | | 75 - 120 | | 11/09/17 13:16 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409141/4

Matrix: Solid

Analysis Batch: 409141

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0436 | | mg/Kg | | 87 | 40 - 143 |
| Benzene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 70 - 120 |
| Bromodichloromethane | 0.0500 | 0.0449 | | mg/Kg | | 90 | 69 - 120 |
| Bromoform | 0.0500 | 0.0410 | | mg/Kg | | 82 | 56 - 132 |
| Bromomethane | 0.0500 | 0.0478 | | mg/Kg | | 96 | 40 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0534 | | mg/Kg | | 107 | 53 - 141 |
| Carbon disulfide | 0.0500 | 0.0525 | | mg/Kg | | 105 | 66 - 120 |
| Carbon tetrachloride | 0.0500 | 0.0443 | | mg/Kg | | 89 | 65 - 122 |
| Chlorobenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 70 - 120 |
| Chloroethane | 0.0500 | 0.0496 | | mg/Kg | | 99 | 45 - 127 |
| Chloroform | 0.0500 | 0.0472 | | mg/Kg | | 94 | 70 - 120 |
| Chloromethane | 0.0500 | 0.0540 | | mg/Kg | | 108 | 54 - 147 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 64 - 127 |
| Dibromochloromethane | 0.0500 | 0.0447 | | mg/Kg | | 89 | 68 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0541 | | mg/Kg | | 108 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0467 | | mg/Kg | | 93 | 68 - 127 |
| 1,1-Dichloroethene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 67 - 122 |
| 1,2-Dichloropropane | 0.0500 | 0.0548 | | mg/Kg | | 110 | 67 - 130 |
| Ethylbenzene | 0.0500 | 0.0521 | | mg/Kg | | 104 | 70 - 120 |
| 2-Hexanone | 0.0500 | 0.0504 | | mg/Kg | | 101 | 56 - 135 |
| Methylene Chloride | 0.0500 | 0.0532 | | mg/Kg | | 106 | 69 - 125 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0517 | | mg/Kg | | 103 | 56 - 133 |
| Methyl tert-butyl ether | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 120 |
| Styrene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 70 - 120 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0472 | | mg/Kg | | 94 | 67 - 127 |
| Tetrachloroethene | 0.0500 | 0.0544 | | mg/Kg | | 109 | 70 - 128 |
| Toluene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 62 - 128 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0458 | | mg/Kg | | 92 | 70 - 125 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0520 | | mg/Kg | | 104 | 70 - 122 |
| Trichloroethene | 0.0500 | 0.0516 | | mg/Kg | | 103 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0509 | | mg/Kg | | 102 | 43 - 133 |
| Vinyl chloride | 0.0500 | 0.0595 | | mg/Kg | | 119 | 64 - 126 |
| Xylenes, Total | 0.100 | 0.0974 | | mg/Kg | | 97 | 70 - 125 |

| Surrogate | LCS LCS | | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 83 | | 72 - 124 |
| Dibromofluoromethane | 88 | | 75 - 120 |
| 1,2-Dichloroethane-d4 (Surr) | 88 | | 75 - 126 |
| Toluene-d8 (Surr) | 104 | | 75 - 120 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408658/1-A

Matrix: Solid

Analysis Batch: 408747

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 408658

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-408658/1-A
Matrix: Solid
Analysis Batch: 408747

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408658

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/06/17 15:06 | 11/07/17 12:37 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 80 | | 44 - 121 | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2-Fluorophenol | 86 | | 46 - 133 | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Nitrobenzene-d5 | 73 | | 41 - 120 | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Phenol-d5 | 80 | | 46 - 125 | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| Terphenyl-d14 | 81 | | 35 - 160 | 11/06/17 15:06 | 11/07/17 12:37 | 1 |
| 2,4,6-Tribromophenol | 74 | | 25 - 139 | 11/06/17 15:06 | 11/07/17 12:37 | 1 |

Lab Sample ID: LCS 500-408658/2-A
Matrix: Solid
Analysis Batch: 408747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408658

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 0.884 | | mg/Kg | | 66 | 58 - 110 |
| Acenaphthylene | 1.33 | 0.910 | | mg/Kg | | 68 | 60 - 110 |
| Anthracene | 1.33 | 0.988 | | mg/Kg | | 74 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.01 | | mg/Kg | | 75 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 0.987 | | mg/Kg | | 74 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.03 | | mg/Kg | | 77 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 0.936 | | mg/Kg | | 70 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.05 | | mg/Kg | | 79 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 0.933 | | mg/Kg | | 70 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 0.956 | | mg/Kg | | 72 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.15 | | mg/Kg | | 86 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 0.991 | | mg/Kg | | 74 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.13 | | mg/Kg | | 85 | 61 - 116 |
| Carbazole | 1.33 | 1.14 | | mg/Kg | | 86 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 0.911 | | mg/Kg | | 68 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.02 | | mg/Kg | | 77 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 0.912 | | mg/Kg | | 68 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 0.953 | | mg/Kg | | 71 | 64 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408658/2-A
Matrix: Solid
Analysis Batch: 408747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408658

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Chlorophenyl phenyl ether | 1.33 | 0.933 | | mg/Kg | | 70 | 63 - 110 |
| Chrysene | 1.33 | 1.02 | | mg/Kg | | 77 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 0.989 | | mg/Kg | | 74 | 64 - 119 |
| Dibenzofuran | 1.33 | 0.929 | | mg/Kg | | 70 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 0.904 | | mg/Kg | | 68 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 0.861 | | mg/Kg | | 65 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 0.870 | | mg/Kg | | 65 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 1.08 | | mg/Kg | | 81 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 0.991 | | mg/Kg | | 74 | 58 - 120 |
| Diethyl phthalate | 1.33 | 0.947 | | mg/Kg | | 71 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 0.844 | | mg/Kg | | 63 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 0.959 | | mg/Kg | | 72 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 0.991 | | mg/Kg | | 74 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.33 | | mg/Kg | | 50 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 0.914 | | mg/Kg | | 34 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.04 | | mg/Kg | | 78 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 0.988 | | mg/Kg | | 74 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.21 | | mg/Kg | | 91 | 63 - 119 |
| Fluoranthene | 1.33 | 1.02 | | mg/Kg | | 76 | 62 - 120 |
| Fluorene | 1.33 | 0.917 | | mg/Kg | | 69 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 0.943 | | mg/Kg | | 71 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 0.863 | | mg/Kg | | 65 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.738 | | mg/Kg | | 55 | 10 - 106 |
| Hexachloroethane | 1.33 | 0.899 | | mg/Kg | | 67 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 0.982 | | mg/Kg | | 74 | 57 - 127 |
| Isophorone | 1.33 | 0.888 | | mg/Kg | | 67 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 0.920 | | mg/Kg | | 69 | 62 - 110 |
| 2-Methylphenol | 1.33 | 0.959 | | mg/Kg | | 72 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 0.999 | | mg/Kg | | 75 | 57 - 120 |
| Naphthalene | 1.33 | 0.902 | | mg/Kg | | 68 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 0.990 | | mg/Kg | | 74 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.05 | | mg/Kg | | 79 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.32 | | mg/Kg | | 99 | 60 - 160 |
| Nitrobenzene | 1.33 | 0.925 | | mg/Kg | | 69 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.02 | | mg/Kg | | 77 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 1.65 | | mg/Kg | | 62 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 0.958 | | mg/Kg | | 72 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.01 | | mg/Kg | | 76 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.03 | | mg/Kg | | 78 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.56 | | mg/Kg | | 58 | 13 - 112 |
| Phenanthrene | 1.33 | 0.976 | | mg/Kg | | 73 | 62 - 120 |
| Phenol | 1.33 | 0.916 | | mg/Kg | | 69 | 56 - 122 |
| Pyrene | 1.33 | 1.01 | | mg/Kg | | 76 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 0.900 | | mg/Kg | | 67 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.05 | | mg/Kg | | 79 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 0.922 | | mg/Kg | | 69 | 57 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408658/2-A
Matrix: Solid
Analysis Batch: 408747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408658

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|------------------|------------------|----------|
| 2-Fluorobiphenyl | 68 | | 44 - 121 |
| 2-Fluorophenol | 72 | | 46 - 133 |
| Nitrobenzene-d5 | 69 | | 41 - 120 |
| Phenol-d5 | 76 | | 46 - 125 |
| Terphenyl-d14 | 76 | | 35 - 160 |
| 2,4,6-Tribromophenol | 76 | | 25 - 139 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-408289/1-A
Matrix: Solid
Analysis Batch: 408791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408289

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------------|-----------------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.017 | | 0.017 | 0.0059 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| PCB-1221 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| PCB-1232 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| PCB-1242 | <0.017 | | 0.017 | 0.0055 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| PCB-1248 | <0.017 | | 0.017 | 0.0066 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| PCB-1254 | <0.017 | | 0.017 | 0.0036 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| PCB-1260 | <0.017 | | 0.017 | 0.0082 | mg/Kg | | 11/03/17 07:23 | 11/07/17 21:50 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------------|-----------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 94 | | 49 - 129 | 11/03/17 07:23 | 11/07/17 21:50 | 1 |
| DCB Decachlorobiphenyl | 103 | | 37 - 121 | 11/03/17 07:23 | 11/07/17 21:50 | 1 |

Lab Sample ID: LCS 500-408289/2-A
Matrix: Solid
Analysis Batch: 408791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408289

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|----------------|---------------|------------------|-------|---|------|----------|
| PCB-1016 | 0.167 | 0.140 | | mg/Kg | | 84 | 57 - 120 |
| PCB-1260 | 0.167 | 0.153 | | mg/Kg | | 92 | 61 - 125 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------|------------------|------------------|----------|
| Tetrachloro-m-xylene | 89 | | 49 - 129 |
| DCB Decachlorobiphenyl | 96 | | 37 - 121 |

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-407860/1-A
Matrix: Solid
Analysis Batch: 408000

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 407860

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------------|-----------------|-----|------|-------|---|----------------|----------------|---------|
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-407860/1-A
Matrix: Solid
Analysis Batch: 408000

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 407860

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Cadmium | 0.0615 | J | 0.20 | 0.036 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Copper | 0.486 | J | 1.0 | 0.28 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Manganese | 0.391 | J | 1.0 | 0.15 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 10/31/17 16:37 | 11/01/17 12:36 | 1 |

Lab Sample ID: LCS 500-407860/2-A
Matrix: Solid
Analysis Batch: 408000

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 407860

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|-------|---|------|----------|
| Antimony | 50.0 | 46.8 | | mg/Kg | | 94 | 80 - 120 |
| Arsenic | 10.0 | 9.38 | | mg/Kg | | 94 | 80 - 120 |
| Barium | 200 | 203 | | mg/Kg | | 102 | 80 - 120 |
| Beryllium | 5.00 | 5.02 | | mg/Kg | | 100 | 80 - 120 |
| Cadmium | 5.00 | 4.83 | | mg/Kg | | 97 | 80 - 120 |
| Chromium | 20.0 | 21.4 | | mg/Kg | | 107 | 80 - 120 |
| Cobalt | 50.0 | 50.8 | | mg/Kg | | 102 | 80 - 120 |
| Copper | 25.0 | 26.5 | | mg/Kg | | 106 | 80 - 120 |
| Lead | 10.0 | 9.14 | | mg/Kg | | 91 | 80 - 120 |
| Manganese | 50.0 | 52.1 | | mg/Kg | | 104 | 80 - 120 |
| Nickel | 50.0 | 50.4 | | mg/Kg | | 101 | 80 - 120 |
| Selenium | 10.0 | 8.74 | | mg/Kg | | 87 | 80 - 120 |
| Silver | 5.00 | 4.92 | | mg/Kg | | 98 | 80 - 120 |
| Thallium | 10.0 | 8.21 | | mg/Kg | | 82 | 80 - 120 |
| Vanadium | 50.0 | 53.4 | | mg/Kg | | 107 | 80 - 120 |
| Zinc | 50.0 | 51.6 | | mg/Kg | | 103 | 80 - 120 |

Lab Sample ID: MB 500-408066/1-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|----|-----|-------|---|----------------|----------------|---------|
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-408066/2-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Iron | 100 | 104 | | mg/Kg | | 104 | 80 - 120 |

Lab Sample ID: LCS 500-408096/2-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408096

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Arsenic | 0.100 | 0.0976 | | mg/L | | 98 | 80 - 120 |
| Barium | 0.500 | 0.527 | | mg/L | | 105 | 80 - 120 |
| Beryllium | 0.0500 | 0.0493 | | mg/L | | 99 | 80 - 120 |
| Cadmium | 0.0500 | 0.0514 | | mg/L | | 103 | 80 - 120 |
| Chromium | 0.200 | 0.202 | | mg/L | | 101 | 80 - 120 |
| Cobalt | 0.500 | 0.509 | | mg/L | | 102 | 80 - 120 |
| Copper | 0.250 | 0.270 | | mg/L | | 108 | 80 - 120 |
| Iron | 1.00 | 1.06 | | mg/L | | 106 | 80 - 120 |
| Lead | 0.100 | 0.102 | | mg/L | | 102 | 80 - 120 |
| Manganese | 0.500 | 0.490 | | mg/L | | 98 | 80 - 120 |
| Nickel | 0.500 | 0.502 | | mg/L | | 100 | 80 - 120 |
| Selenium | 0.100 | 0.0962 | | mg/L | | 96 | 80 - 120 |
| Silver | 0.0500 | 0.0499 | | mg/L | | 100 | 80 - 120 |
| Vanadium | 0.500 | 0.512 | | mg/L | | 102 | 80 - 120 |
| Zinc | 0.500 | 0.492 | J | mg/L | | 98 | 80 - 120 |

Lab Sample ID: LCS 500-408219/2-A
Matrix: Solid
Analysis Batch: 408480

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408219

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Iron | 1.00 | 1.04 | | mg/L | | 104 | 80 - 120 |
| Manganese | 0.500 | 0.483 | | mg/L | | 97 | 80 - 120 |

Lab Sample ID: LB 500-407959/1-B
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408096

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-407959/1-B
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408096

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|-------|------|---|----------------|----------------|---------|
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/02/17 08:35 | 11/02/17 16:18 | 1 |

Lab Sample ID: LB 500-407967/1-B
Matrix: Solid
Analysis Batch: 408480

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 408219

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|-------|-------|------|---|----------------|----------------|---------|
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/02/17 14:21 | 11/03/17 22:38 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/02/17 14:21 | 11/03/17 22:38 | 1 |

Lab Sample ID: 500-136509-6 MS
Matrix: Solid
Analysis Batch: 408480

Client Sample ID: 3160-10-3 (0-2.5')
Prep Type: SPLP East
Prep Batch: 408219

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Iron | 88 | | 1.00 | 99.3 | 4 | mg/L | | 1086 | 50 - 150 |
| Manganese | 0.61 | | 0.500 | 1.00 | | mg/L | | 79 | 50 - 150 |

Lab Sample ID: 500-136509-6 DU
Matrix: Solid
Analysis Batch: 408480

Client Sample ID: 3160-10-3 (0-2.5')
Prep Type: SPLP East
Prep Batch: 408219

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|-----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Iron | 88 | | 96.7 | | mg/L | | 9 | 20 |
| Manganese | 0.61 | | 0.678 | | mg/L | | 11 | 20 |

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-408096/2-A
Matrix: Solid
Analysis Batch: 408313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408096

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.485 | | mg/L | | 97 | 80 - 120 |
| Thallium | 0.100 | 0.101 | | mg/L | | 101 | 80 - 120 |

Lab Sample ID: LB 500-407959/1-B
Matrix: Solid
Analysis Batch: 408313

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408096

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/02/17 08:35 | 11/02/17 17:03 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/02/17 08:35 | 11/02/17 17:03 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-408351/12-A
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408351

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:23 | 1 |

Lab Sample ID: LCS 500-408351/13-A
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408351

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|------|---|------|----------|
| Mercury | 0.00200 | 0.00185 | | mg/L | | 92 | 80 - 120 |

Lab Sample ID: LB 500-407959/1-D
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408351

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:26 | 1 |

Lab Sample ID: 500-136509-1 MS
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: 3160-9-2 (0-4')
Prep Type: TCLP
Prep Batch: 408351

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Mercury | <0.00020 | | 0.00100 | 0.000942 | | mg/L | | 94 | 50 - 150 |

Lab Sample ID: 500-136509-1 DU
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: 3160-9-2 (0-4')
Prep Type: TCLP
Prep Batch: 408351

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Mercury | <0.00020 | | <0.00020 | | mg/L | | NC | 20 |

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-407976/12-A
Matrix: Solid
Analysis Batch: 408181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 407976

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/01/17 15:30 | 11/02/17 11:48 | 1 |

Lab Sample ID: LCS 500-407976/13-A
Matrix: Solid
Analysis Batch: 408181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 407976

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.170 | | mg/Kg | | 102 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-136509-1 MS
Matrix: Solid
Analysis Batch: 408181

Client Sample ID: 3160-9-2 (0-4')
Prep Type: Total/NA
Prep Batch: 407976
 %Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Mercury | 0.015 | J | 0.0921 | 0.102 | | mg/Kg | ☼ | 95 | 75 - 125 |

Lab Sample ID: 500-136509-1 MSD
Matrix: Solid
Analysis Batch: 408181

Client Sample ID: 3160-9-2 (0-4')
Prep Type: Total/NA
Prep Batch: 407976
 %Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Mercury | 0.015 | J | 0.0883 | 0.0962 | | mg/Kg | ☼ | 92 | 75 - 125 | 6 | 20 |

Lab Sample ID: 500-136509-1 DU
Matrix: Solid
Analysis Batch: 408181

Client Sample ID: 3160-9-2 (0-4')
Prep Type: Total/NA
Prep Batch: 407976
 %Rec.

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|-------|---|-----|-------|
| Mercury | 0.015 | J | 0.0258 | F5 | mg/Kg | ☼ | 54 | 20 |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-2 (0-4')

Date Collected: 10/30/17 13:05

Date Received: 10/31/17 08:45

Lab Sample ID: 500-136509-1

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408311 | 11/02/17 16:38 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408313 | 11/02/17 17:10 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408351 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:29 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407791 | 10/31/17 13:23 | LWN | TAL CHI |

Client Sample ID: 3160-9-2 (0-4')

Date Collected: 10/30/17 13:05

Date Received: 10/31/17 08:45

Lab Sample ID: 500-136509-1

Matrix: Solid

Percent Solids: 82.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408124 | 10/31/17 15:36 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408093 | 11/02/17 16:29 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408658 | 11/06/17 15:06 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408758 | 11/07/17 12:58 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408289 | 11/03/17 07:23 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 408791 | 11/08/17 02:11 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 407860 | 10/31/17 16:37 | BDE | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408000 | 11/01/17 14:11 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 19:13 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 407976 | 11/01/17 15:30 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408181 | 11/02/17 12:20 | EEN | TAL CHI |

Client Sample ID: 3160-9-3 (0-4')

Date Collected: 10/30/17 13:20

Date Received: 10/31/17 08:45

Lab Sample ID: 500-136509-2

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408311 | 11/02/17 16:42 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408313 | 11/02/17 17:13 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408351 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:34 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407791 | 10/31/17 13:23 | LWN | TAL CHI |

Client Sample ID: 3160-9-3 (0-4')

Lab Sample ID: 500-136509-2

Date Collected: 10/30/17 13:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408124 | 10/31/17 15:36 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408093 | 11/02/17 16:54 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408658 | 11/06/17 15:06 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408758 | 11/07/17 15:38 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408289 | 11/03/17 07:23 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 408791 | 11/08/17 02:27 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 407860 | 10/31/17 16:37 | BDE | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408000 | 11/01/17 14:24 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 19:17 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 407976 | 11/01/17 15:30 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408181 | 11/02/17 12:29 | EEN | TAL CHI |

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 407967 | 11/01/17 13:31 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408219 | 11/02/17 14:21 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408480 | 11/03/17 23:04 | KML | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408311 | 11/02/17 16:46 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408313 | 11/02/17 17:16 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408351 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:38 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407791 | 10/31/17 13:23 | LWN | TAL CHI |

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 80.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408047 | 10/30/17 13:35 | WRE | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-1 (0-2.5')

Lab Sample ID: 500-136509-3

Date Collected: 10/30/17 13:35

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 80.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260B | | 50 | 409141 | 11/09/17 17:46 | PMF | TAL CHI |
| Total/NA | Prep | 3541 | | | 408658 | 11/06/17 15:06 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408758 | 11/07/17 13:24 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 407860 | 10/31/17 16:37 | BDE | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408000 | 11/01/17 14:28 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 19:21 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 407976 | 11/01/17 15:30 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408181 | 11/02/17 12:31 | EEN | TAL CHI |

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

Date Collected: 10/30/17 13:50

Matrix: Solid

Date Received: 10/31/17 08:45

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408311 | 11/02/17 16:50 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408313 | 11/02/17 17:20 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408351 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:40 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407791 | 10/31/17 13:23 | LWN | TAL CHI |

Client Sample ID: 3160-10-2 (0-2.5')

Lab Sample ID: 500-136509-4

Date Collected: 10/30/17 13:50

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408124 | 10/31/17 15:36 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408093 | 11/02/17 17:19 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408658 | 11/06/17 15:06 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408758 | 11/07/17 13:51 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 407860 | 10/31/17 16:37 | BDE | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408000 | 11/01/17 14:32 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 19:25 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 407976 | 11/01/17 15:30 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408181 | 11/02/17 12:37 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

Date Collected: 10/30/17 14:00

Matrix: Solid

Date Received: 10/31/17 08:45

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 407967 | 11/01/17 13:31 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408219 | 11/02/17 14:21 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408480 | 11/03/17 23:12 | KML | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408311 | 11/02/17 16:54 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408313 | 11/02/17 17:23 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408351 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:41 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407791 | 10/31/17 13:23 | LWN | TAL CHI |

Client Sample ID: 3160-9-1 (0-4.0')

Lab Sample ID: 500-136509-5

Date Collected: 10/30/17 14:00

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 83.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408124 | 10/31/17 15:36 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408093 | 11/02/17 17:44 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408658 | 11/06/17 15:06 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408758 | 11/07/17 14:18 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408289 | 11/03/17 07:23 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 408791 | 11/08/17 02:42 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 407860 | 10/31/17 16:37 | BDE | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408000 | 11/01/17 14:36 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 19:29 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 407976 | 11/01/17 15:30 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408181 | 11/02/17 12:40 | EEN | TAL CHI |

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 407967 | 11/01/17 13:31 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408219 | 11/02/17 14:21 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408480 | 11/03/17 23:16 | KML | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408311 | 11/02/17 16:58 | PJ1 | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408096 | 11/02/17 08:35 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408313 | 11/02/17 17:27 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 407959 | 11/01/17 13:31 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408351 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:43 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407791 | 10/31/17 13:23 | LWN | TAL CHI |

Client Sample ID: 3160-10-3 (0-2.5')

Lab Sample ID: 500-136509-6

Date Collected: 10/30/17 14:20

Matrix: Solid

Date Received: 10/31/17 08:45

Percent Solids: 79.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408047 | 10/30/17 14:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 50 | 409141 | 11/09/17 18:12 | PMF | TAL CHI |
| Total/NA | Prep | 3541 | | | 408658 | 11/06/17 15:06 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408758 | 11/07/17 14:45 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 407860 | 10/31/17 16:37 | BDE | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408000 | 11/01/17 14:40 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 19:33 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 407976 | 11/01/17 15:30 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408181 | 11/02/17 12:42 | EEN | TAL CHI |

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136509-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| Illinois | NELAP | 5 | 100201 | 04-30-18 |

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|----------------------------|
| 6020A | 3010A | Solid | Antimony |
| 6020A | 3010A | Solid | Thallium |
| 8260B | 5035 | Solid | 1,3-Dichloropropene, Total |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 601
Phone: 708.534.5200 Fax: 708.534.



500-136509 COC

Report To (optional)
Contact: TERRY DIXON
Company: AMELFW WOOD
Address: 4232 BRANDYWINE
Address: SUITE A
Phone: PEORIA, IL 61614
309-692-4422
E-Mail:

Bill To (optional)
Contact: JAMIE
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-136509

Chain of Custody Number: _____

Page _____ of _____

Temperature °C of Cooler: 1.9

| Client | | Client Project # | | Preservative | | Parameter | | Matrix | | Comments | | | | | | |
|-------------------|--------|------------------------|----------|---------------|-----------------|-------------|------------------------------|------------------------------|-----|--------------|--------------------------|----|----------|--|--|---------------------------------------|
| Amel-fw, wood | | 3160150049 | | | | | | | | | | | | | | |
| Project Name | | Project Location/State | | Lab Project # | | Lab PM | | Sampler | | | | | | | | |
| IDOT BOSTON WO-28 | | IL Rt 37 BOSTON, IL | | 50013898 | | DICK WRIGHT | | TAM MCNALLY | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | Sampling | | # of Containers | Matrix | NO ₃ ⁻ | NO ₂ ⁻ | PCB | TOTAL METALS | TELEP METALS SPLP metals | PH | % Solids | | | |
| | | | Date | Time | | | | | | | | | | | | |
| 1 | | 3160-9-2 (0-4') | 10/30 | 1305 | 6 | S | X | X | X | X | X | X | X | | | PLEASE HOLD SPLP |
| 2 | | 3160-9-3 (0-4') | 10/30 | 1320 | 6 | S | X | X | X | X | X | X | X | | | BASED ON TELEP |
| 3 | | 3160-10-1 (0-2.5') | 10/30 | 1335 | 6 | S | X | X | X | X | X | X | X | | | RESULTS. |
| 4 | | 3160-10-2 (0-2.5') | 10/30 | 1350 | 6 | S | X | X | X | X | X | X | X | | | |
| 5 | | 3160-9-1 (0-4.0') | 10/30 | 1400 | 6 | S | X | X | X | X | X | X | X | | | PLEASE SEE EMAIL |
| 6 | | 3160-10-3 (0-2.5') | 10/30 | 1420 | 6 | S | X | X | X | X | X | X | X | | | 18 total metals list from TERRY DIXON |

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client

Disposal by Lab

Archive for ___ Months

(A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|---------------------------------------|--------------------------------|-------------------------|---------------------|-----------------------------------|--------------------------|-------------------------|---------------------|
| Relinquished By <u>[Signature]</u> | Company <u>Amel-fw wood</u> | Date <u>10/30/17</u> | Time <u>1700</u> | Received By <u>[Signature]</u> | Company <u>TA-ART</u> | Date <u>10/31/17</u> | Time <u>0845</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |

Lab Courier

Shipped FedEx

Hand Delivered

Matrix Key
WW - Wastewater
W - Water
S - Soil
SL - Sludge
MS - Miscellaneous
OL - Oil
A - Air
SE - Sediment
SO - Soil
L - Leachate
WI - Wipe
DW - Drinking Water
O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-136509-1

Login Number: 136509

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

| Question | Answer | Comment |
|---|--------|---------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 1.9 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-136575-1
Client Project/Site: IDOT - Benton - WO 028

For:
AMEC Foster Wheeler E & I, Inc
4232 Brandywine Drive
Suite A
Peoria, Illinois 61614

Attn: Mr. Terry Dixon



Authorized for release by:
11/13/2017 4:41:04 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Job ID: 500-136575-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-136575-1

Receipt

The samples were received on 11/1/2017 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.9° C, 2.4° C and 3.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: The method blank for preparation batch 500-408732 and analytical batch 500-408867 contained Benzo[a]anthracene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8081B: The following sample was diluted due to the nature of the sample matrix: 3160-23-2 (0-4.5') (500-136575-7). Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The following sample required a mercury clean-up, via EPA Method 3660A, to reduce matrix interferences caused by sulfur: 3160-23-1 (0-4.5') (500-136575-6). The reagent lot number used was: 165418.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: 3160-45-3 (0-5') (500-136575-25).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-4 (0-4')

Lab Sample ID: 500-136575-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.057 | | 0.017 | 0.0074 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthylene | 0.0075 | J | 0.036 | 0.0048 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.10 | | 0.036 | 0.0049 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.083 | | 0.036 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.078 | | 0.036 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.065 | | 0.036 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.036 | | 0.036 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.10 | | 0.036 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.044 | | 0.036 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.15 | J | 0.18 | 0.043 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.12 | | 0.036 | 0.0068 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.051 | | 0.036 | 0.0095 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.34 | | 0.074 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.20 | | 0.036 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.46 | | 0.036 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.14 | | 0.036 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.46 | J F2 F1 | 1.1 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 6.1 | F2 F1 | 0.53 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 100 | | 0.53 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.48 | | 0.21 | 0.050 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.26 | B | 0.11 | 0.019 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 9.5 | F1 | 0.53 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.0 | | 0.27 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 13 | F1 | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | B | 11 | 5.6 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 30 | | 0.27 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 180 | | 0.53 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.5 | | 0.53 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.77 | F1 | 0.53 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 17 | | 0.27 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 71 | F1 | 1.1 | 0.47 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.32 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.41 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.027 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.053 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.036 | | 0.017 | 0.0058 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-16-3 (0-4')

Lab Sample ID: 500-136575-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.075 | | 0.021 | 0.0092 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 7.5 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 530 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.48 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.16 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 19 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.9 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | B | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-3 (0-4') (Continued)

Lab Sample ID: 500-136575-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Lead | 13 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 170 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.50 | J | 0.55 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 33 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 53 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.0 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.013 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.018 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.042 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.018 | | 0.017 | 0.0057 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.066 | | 0.021 | 0.0090 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 7.2 | | 0.49 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 51 | | 0.49 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.37 | | 0.20 | 0.046 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.059 | J B | 0.098 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.49 | 0.24 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.9 | | 0.24 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 13 | | 0.49 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | B | 9.8 | 5.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.24 | 0.11 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 170 | | 0.49 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.49 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.74 | | 0.49 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Thallium | 0.27 | J | 0.49 | 0.24 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 28 | | 0.24 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 58 | | 0.98 | 0.43 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.30 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.72 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.017 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.040 | | 0.018 | 0.0059 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.029 | | 0.018 | 0.0079 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.016 | J | 0.037 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.023 | J | 0.037 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.017 | J | 0.037 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.014 | J | 0.037 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.018 | J | 0.037 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.013 | J | 0.076 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-1 (0-4') (Continued)

Lab Sample ID: 500-136575-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Phenanthrene | 0.018 | J | 0.037 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.017 | J | 0.037 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 10 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.60 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.10 | J B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 17 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.3 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 17000 | B | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 25 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 1600 | | 2.8 | 0.41 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.90 | | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 32 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 45 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.67 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.41 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.030 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.041 | | 0.017 | 0.0058 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.043 | | 0.037 | 0.0063 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.084 | | 0.037 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.079 | | 0.037 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.10 | | 0.037 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.062 | | 0.037 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.095 | | 0.037 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.044 | | 0.037 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.092 | | 0.037 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluorene | 0.0082 | J | 0.037 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.050 | | 0.037 | 0.0098 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.26 | | 0.076 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.17 | | 0.037 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.34 | | 0.037 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.11 | | 0.037 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 8.2 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.63 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.39 | B | 0.11 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 10 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 22 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | B | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 53 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 350 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-5 (0-4') (Continued)

Lab Sample ID: 500-136575-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Nickel | 15 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.3 | | 0.57 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 24 | | 0.29 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 130 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.37 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.29 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.010 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.095 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.058 | | 0.020 | 0.0066 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.052 | | 0.018 | 0.0077 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0058 | J | 0.036 | 0.0049 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.015 | J | 0.036 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.0099 | J | 0.036 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.0098 | J | 0.036 | 0.0098 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.011 | J | 0.036 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.0091 | J | 0.073 | 0.0066 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.017 | J | 0.036 | 0.0050 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.010 | J | 0.036 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.7 | | 0.53 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 68 | | 0.53 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.46 | | 0.21 | 0.049 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.31 | B | 0.11 | 0.019 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.53 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.8 | | 0.26 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.7 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 12000 | B | 11 | 5.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 19 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 280 | | 0.53 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.41 | J | 0.53 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 20 | | 0.26 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 180 | | 1.1 | 0.46 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.30 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.22 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.057 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.35 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.031 | | 0.018 | 0.0060 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.2 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.046 | | 0.039 | 0.0066 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.086 | | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.087 | | 0.039 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5') (Continued)

Lab Sample ID: 500-136575-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Benzo[b]fluoranthene | 0.091 | | 0.039 | 0.0085 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.074 | | 0.039 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.015 | J | 0.039 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.086 | | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.046 | | 0.039 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.13 | J | 0.20 | 0.046 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.10 | | 0.039 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.054 | | 0.039 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.25 | | 0.079 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.12 | | 0.039 | 0.0061 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.34 | | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.12 | | 0.039 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 5.8 | | 0.60 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 130 | | 0.60 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.50 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.50 | B | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.60 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.2 | | 0.30 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 19 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 12000 | B | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 100 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 320 | | 0.60 | 0.088 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 16 | | 0.60 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.67 | | 0.60 | 0.35 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 18 | | 0.30 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 91 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.85 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0020 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.077 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.058 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.046 | | 0.018 | 0.0059 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.1 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.039 | | 0.020 | 0.0088 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 7.8 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 76 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.52 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.18 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 20 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 11 | | 0.28 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | B | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 17 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 560 | | 0.56 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 16 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.93 | | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 31 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-1 (0-4') (Continued)

Lab Sample ID: 500-136575-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Zinc | 110 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.35 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0031 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.013 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 4.8 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.032 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.25 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.43 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.048 | | 0.021 | 0.0069 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.024 | | 0.018 | 0.0080 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 9.2 | | 0.49 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 100 | | 0.49 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.46 | | 0.20 | 0.046 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.089 | J B | 0.098 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 19 | | 0.49 | 0.24 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.7 | | 0.25 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.49 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 21000 | B | 9.8 | 5.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 14 | | 0.25 | 0.11 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 220 | | 0.49 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.49 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.66 | | 0.49 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 32 | | 0.25 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 55 | | 0.98 | 0.43 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.33 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.018 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.023 | | 0.018 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.042 | | 0.020 | 0.0087 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 6.4 | | 0.59 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 53 | | 0.59 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.43 | | 0.23 | 0.055 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.065 | J B | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 20 | | 0.59 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.5 | | 0.29 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | | 0.59 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | B | 12 | 6.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 12 | | 0.29 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 140 | | 0.59 | 0.085 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 30 | | 0.29 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-2 (0-4') (Continued)

Lab Sample ID: 500-136575-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Zinc | 60 | | 1.2 | 0.52 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.15 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.10 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.027 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.027 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.022 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.041 | | 0.017 | 0.0076 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0078 | J | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.022 | J | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.025 | J | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.012 | J | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.0083 | J | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 9.5 | | 0.57 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 92 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.52 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.097 | J B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 19 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 11 | | 0.28 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 21000 | B | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 540 | | 0.57 | 0.082 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.86 | | 0.57 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 36 | | 0.28 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 58 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.85 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.053 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.14 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.063 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|------|-------|-------|---------|---|--------|-----------|
| Arsenic | 8.1 | | 0.58 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 74 | | 0.58 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.51 | | 0.23 | 0.055 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.085 | J B | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 21 | | 0.58 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-1 (0-5') (Continued)

Lab Sample ID: 500-136575-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Cobalt | 7.2 | | 0.29 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 18 | | 0.58 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 22000 | B | 12 | 6.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.29 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 140 | | 0.58 | 0.085 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 19 | | 0.58 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.89 | | 0.58 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 35 | | 0.29 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 56 | | 1.2 | 0.51 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.018 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.74 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.024 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.025 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.099 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.031 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.045 | | 0.021 | 0.0090 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0085 | J | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.018 | J | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.010 | J | 0.038 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.0093 | J | 0.038 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.018 | J | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.011 | J | 0.038 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.021 | J | 0.038 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.0099 | J | 0.038 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.4 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.52 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.12 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 18 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.7 | | 0.28 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 21000 | B | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 23 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 270 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 17 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.63 | | 0.55 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 30 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 63 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.58 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.25 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Selenium | 0.020 | J | 0.050 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.035 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.075 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-2 (0-5') (Continued)

Lab Sample ID: 500-136575-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Mercury | 0.035 | | 0.018 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.032 | | 0.018 | 0.0080 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.073 | | 0.040 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.15 | | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.089 | | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.11 | | 0.040 | 0.0087 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.072 | | 0.040 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.012 | J | 0.040 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.16 | | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.053 | | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.74 | | 0.20 | 0.047 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.17 | | 0.040 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluorene | 0.028 | J | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.062 | | 0.040 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylphenol | 0.56 | | 0.20 | 0.064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 3 & 4 Methylphenol | 0.46 | | 0.20 | 0.067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 2.5 | | 0.040 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.97 | | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenol | 0.41 | | 0.20 | 0.089 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.19 | | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene - DL | 3.7 | | 0.16 | 0.015 | mg/Kg | 2 | ☼ | 8270D | Total/NA |
| Arsenic | 11 | | 0.52 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 84 | | 0.52 | 0.059 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.32 | | 0.21 | 0.048 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.095 | J B | 0.10 | 0.019 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.52 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 2.7 | | 0.26 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.7 | | 0.52 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | B | 10 | 5.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 45 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 65 | | 0.52 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 7.4 | | 0.52 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.9 | | 0.52 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Thallium | 0.87 | | 0.52 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 28 | | 0.26 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 32 | | 1.0 | 0.45 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.33 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.84 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.037 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.44 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.14 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 3.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-1 (0-3.5') (Continued)

Lab Sample ID: 500-136575-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]pyrene | 0.016 | J | 0.040 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.0097 | J | 0.082 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.0097 | J | 0.040 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 5.1 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.42 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.088 | J B | 0.11 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.1 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 14000 | B | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 660 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 10 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.1 | | 0.57 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 21 | | 0.29 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 40 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.61 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Selenium | 0.021 | J | 0.050 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.039 | | 0.018 | 0.0061 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.4 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.025 | | 0.020 | 0.0089 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.0086 | J | 0.040 | 0.0068 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.023 | J B | 0.040 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.017 | J | 0.040 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.038 | J | 0.040 | 0.0088 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.019 | J F1 | 0.040 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.016 | J | 0.040 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.035 | J | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.028 | J | 0.040 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.051 | J F1 | 0.082 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.027 | J | 0.040 | 0.0063 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.057 | | 0.040 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.034 | J | 0.040 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 14 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 280 | | 0.61 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 1.0 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.14 | B | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 30 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 15 | | 0.30 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 20 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 35000 | B | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 31 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 1600 | | 3.0 | 0.44 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Nickel | 17 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.7 | | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-2 (0-3.5') (Continued)

Lab Sample ID: 500-136575-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Vanadium | 35 | | 0.30 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 54 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.78 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.050 | | 0.020 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.093 | | 0.018 | 0.0078 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.010 | J B | 0.039 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.0097 | J | 0.039 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.017 | J | 0.039 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.011 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.014 | J | 0.039 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.015 | J | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0069 | J | 0.039 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.022 | J | 0.039 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.019 | J | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 9.9 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1100 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.74 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.48 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 15 | | 0.28 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 25000 | B | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 44 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 480 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 16 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.83 | | 0.55 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 24 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 110 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.2 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.065 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.029 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.043 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.034 | | 0.019 | 0.0083 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.11 | | 0.040 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.17 | B | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.084 | | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.095 | | 0.040 | 0.0086 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.040 | | 0.040 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.19 | | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.27 | | 0.20 | 0.047 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-4 (0-3.5') (Continued)

Lab Sample ID: 500-136575-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Fluoranthene | 0.17 | | 0.040 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.65 | | 0.081 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.32 | | 0.040 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 1.2 | | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.22 | | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 11 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 150 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.56 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.22 | B | 0.11 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 4.7 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 19 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 26000 | B | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 41 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 110 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.7 | | 0.57 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 22 | | 0.29 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 61 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.57 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.23 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.026 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Selenium | 0.020 | J | 0.050 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.022 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.11 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.0077 | J | 0.040 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.020 | J B | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.012 | J | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.019 | J | 0.040 | 0.0087 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.027 | J | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.023 | J | 0.040 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.039 | J | 0.081 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.018 | J | 0.040 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.087 | | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.024 | J | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.1 | | 0.60 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 85 | | 0.60 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.49 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.19 | B | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.60 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.8 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 23 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | B | 12 | 6.2 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 32 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 180 | | 0.60 | 0.087 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-5 (0-3.5') (Continued)

Lab Sample ID: 500-136575-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Nickel | 14 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.55 | J | 0.60 | 0.35 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 26 | | 0.30 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 82 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.52 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.010 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.080 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Selenium | 0.020 | J | 0.050 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.067 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.048 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.066 | | 0.019 | 0.0083 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.0076 | J | 0.038 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.018 | J B | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.0089 | J | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.013 | J | 0.038 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.020 | J | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.017 | J | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.033 | J | 0.077 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.017 | J | 0.038 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.082 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.023 | J | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 9.1 | | 0.53 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 83 | | 0.53 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.44 | | 0.21 | 0.050 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.13 | B | 0.11 | 0.019 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.53 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.4 | | 0.27 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 21000 | B | 11 | 5.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.27 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 190 | | 0.53 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.60 | | 0.53 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 30 | | 0.27 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 62 | | 1.1 | 0.47 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.99 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.14 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.17 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.035 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (0-5') (Continued)

Lab Sample ID: 500-136575-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.030 | | 0.019 | 0.0081 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Antimony | 0.40 | J | 1.1 | 0.22 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.5 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 81 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.65 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.088 | J | 0.11 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.8 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 10 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 400 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 13 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.55 | J | 0.57 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 29 | | 0.29 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 38 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.1 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.023 | | 0.018 | 0.0061 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.074 | | 0.019 | 0.0081 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0080 | J B | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.0085 | J | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.015 | J | 0.040 | 0.0087 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.013 | J | 0.040 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.012 | J | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.015 | J | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.2 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 100 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.62 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.15 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 13 | | 0.27 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 27 | | 0.27 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 880 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 18 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.61 | | 0.55 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 23 | | 0.27 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 48 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.87 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.020 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.031 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Selenium | 0.021 | J | 0.050 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.028 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (5-6') (Continued)

Lab Sample ID: 500-136575-22

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Mercury | 0.039 | | 0.018 | 0.0060 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.019 | | 0.018 | 0.0079 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 7.4 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 86 | | 0.61 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.53 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.084 | J | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 12 | | 0.31 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 12 | 6.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 18 | | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 540 | | 0.61 | 0.089 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.37 | J | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 32 | | 0.31 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 45 | | 1.2 | 0.54 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.31 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.015 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.061 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.025 | | 0.019 | 0.0082 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0064 | J B | 0.039 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.012 | J | 0.039 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.011 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.0088 | J | 0.039 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.0091 | J | 0.078 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0063 | J | 0.039 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.021 | J | 0.039 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.011 | J | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.8 | | 0.49 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 97 | | 0.49 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.54 | | 0.20 | 0.046 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.13 | | 0.099 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 20 | | 0.49 | 0.24 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 12 | | 0.25 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 11 | | 0.49 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 17000 | | 9.9 | 5.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 49 | | 0.25 | 0.11 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 530 | | 0.49 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.49 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.69 | | 0.49 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (5-6') (Continued)

Lab Sample ID: 500-136575-24

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Vanadium | 24 | | 0.25 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 51 | | 0.99 | 0.43 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.0 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.022 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.060 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.038 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.038 | | 0.017 | 0.0058 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.054 | | 0.016 | 0.0069 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 3.3 | | 0.50 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 92 | | 2.5 | 0.29 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Beryllium | 2.0 | | 1.0 | 0.23 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Cadmium | 0.12 | | 0.10 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.50 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 22 | | 0.25 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.50 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 50000 | | 50 | 26 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Lead | 15 | | 0.25 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 660 | | 2.5 | 0.36 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Nickel | 31 | | 0.50 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.69 | | 0.50 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 19 | | 0.25 | 0.059 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 59 | | 1.0 | 0.44 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.35 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.030 | | 0.017 | 0.0055 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.1 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.011 | J | 0.039 | 0.0065 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.044 | B | 0.039 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.039 | | 0.039 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.056 | | 0.039 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.024 | J | 0.039 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.027 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.058 | | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.066 | | 0.039 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.019 | J | 0.039 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.035 | J | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.016 | J | 0.039 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.069 | | 0.039 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.072 | | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 11 | | 0.51 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 99 | | 0.51 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.59 | | 0.20 | 0.047 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (5-6') (Continued)

Lab Sample ID: 500-136575-26

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Cadmium | 0.35 | | 0.10 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | | 0.51 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 14 | | 0.25 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 22 | | 0.51 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 24000 | | 10 | 5.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 78 | | 0.25 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 770 | | 0.51 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 26 | | 0.51 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.69 | | 0.51 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 17 | | 0.25 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 97 | | 1.0 | 0.45 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.74 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.12 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Selenium | 0.022 | J | 0.050 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.030 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.058 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Arsenic | 4.7 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 190 | | 0.55 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.83 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.11 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.2 | | 0.27 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.8 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 13000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 15 | | 0.27 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 280 | | 0.55 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 13 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.79 | | 0.55 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 25 | | 0.27 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 38 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.3 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.039 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.021 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.016 | J | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.063 | | 0.017 | 0.0073 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0077 | J B | 0.039 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.0084 | J | 0.039 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.012 | J | 0.039 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.020 | J | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 1.9 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (5-6') (Continued)

Lab Sample ID: 500-136575-28

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Barium | 60 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.64 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.12 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.9 | | 0.28 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 7.3 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 13000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 8.8 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 270 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 21 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 34 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.64 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.033 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.021 | | 0.018 | 0.0060 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.074 | | 0.018 | 0.0079 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Phenanthrene | 0.0067 | J | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 4.9 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 64 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.44 | | 0.23 | 0.054 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.079 | J | 0.11 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 4.8 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 10 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 11 | 6.0 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 11 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 89 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.47 | J | 0.57 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 27 | | 0.29 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 35 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.31 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.55 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.55 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.39 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.018 | J | 0.020 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.2 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.011 | J B | 0.040 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.012 | J | 0.040 | 0.0088 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.017 | J | 0.040 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-2 (0-2') (Continued)

Lab Sample ID: 500-136575-30

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| 2-Methylnaphthalene | 0.014 | J | 0.082 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.030 | J | 0.040 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.018 | J | 0.040 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 9.4 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 70 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.48 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.16 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 20 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.6 | | 0.28 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 20 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 22000 | | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 57 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 200 | | 0.56 | 0.082 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 33 | | 0.28 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 66 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.28 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.097 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.040 | | 0.020 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.011 | J | 0.041 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.028 | J B | 0.041 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.020 | J | 0.041 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.024 | J | 0.041 | 0.0090 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.034 | J | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.034 | J | 0.041 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.058 | J | 0.084 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.030 | J | 0.041 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.12 | | 0.041 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.044 | | 0.041 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.3 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 66 | | 0.61 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.42 | | 0.25 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.11 | J | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 22 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.2 | | 0.31 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 17 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 21000 | | 12 | 6.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 19 | F2 F1 | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 190 | | 0.61 | 0.089 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.49 | J F1 | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 37 | | 0.31 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 53 | | 1.2 | 0.54 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.22 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.089 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-3 (0-2') (Continued)

Lab Sample ID: 500-136575-31

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Mercury | 0.025 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

- 1
- 2
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Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|--------------------|--------|----------------|----------------|
| 500-136575-1 | 3160-16-4 (0-4') | Solid | 10/31/17 08:20 | 11/01/17 09:05 |
| 500-136575-2 | 3160-16-3 (0-4') | Solid | 10/31/17 08:30 | 11/01/17 09:05 |
| 500-136575-3 | 3160-16-2 (0-4') | Solid | 10/31/17 08:07 | 11/01/17 09:05 |
| 500-136575-4 | 3160-16-1 (0-4') | Solid | 10/31/17 08:50 | 11/01/17 09:05 |
| 500-136575-5 | 3160-16-5 (0-4') | Solid | 10/31/17 09:00 | 11/01/17 09:05 |
| 500-136575-6 | 3160-23-1 (0-4.5') | Solid | 10/31/17 09:20 | 11/01/17 09:05 |
| 500-136575-7 | 3160-23-2 (0-4.5') | Solid | 10/31/17 09:30 | 11/01/17 09:05 |
| 500-136575-8 | 3160-25-1 (0-4') | Solid | 10/31/17 09:50 | 11/01/17 09:05 |
| 500-136575-9 | 3160-25-2 (0-4') | Solid | 10/31/17 10:00 | 11/01/17 09:05 |
| 500-136575-10 | 3160-26-2 (0-4') | Solid | 10/31/17 10:10 | 11/01/17 09:05 |
| 500-136575-11 | 3160-26-1 (0-4') | Solid | 10/31/17 10:20 | 11/01/17 09:05 |
| 500-136575-12 | 3160-28-1 (0-5') | Solid | 10/31/17 10:30 | 11/01/17 09:05 |
| 500-136575-13 | 3160-28-2 (0-5') | Solid | 10/31/17 10:40 | 11/01/17 09:05 |
| 500-136575-14 | 3160-28-3 (0-5') | Solid | 10/31/17 10:50 | 11/01/17 09:05 |
| 500-136575-15 | 3160-32-1 (0-3.5') | Solid | 10/31/17 11:00 | 11/01/17 09:05 |
| 500-136575-16 | 3160-32-2 (0-3.5') | Solid | 10/31/17 11:10 | 11/01/17 09:05 |
| 500-136575-17 | 3160-32-3 (0-3.5') | Solid | 10/31/17 11:20 | 11/01/17 09:05 |
| 500-136575-18 | 3160-32-4 (0-3.5') | Solid | 10/31/17 11:30 | 11/01/17 09:05 |
| 500-136575-19 | 3160-32-5 (0-3.5') | Solid | 10/31/17 11:40 | 11/01/17 09:05 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Solid | 10/31/17 12:40 | 11/01/17 09:05 |
| 500-136575-21 | 3160-45-1 (0-5') | Solid | 10/31/17 12:50 | 11/01/17 09:05 |
| 500-136575-22 | 3160-45-1 (5-6') | Solid | 10/31/17 13:00 | 11/01/17 09:05 |
| 500-136575-23 | 3160-45-2 (0-5') | Solid | 10/31/17 13:10 | 11/01/17 09:05 |
| 500-136575-24 | 3160-45-2 (5-6') | Solid | 10/31/17 13:15 | 11/01/17 09:05 |
| 500-136575-25 | 3160-45-3 (0-5') | Solid | 10/31/17 13:20 | 11/01/17 09:05 |
| 500-136575-26 | 3160-45-3 (5-6') | Solid | 10/31/17 13:25 | 11/01/17 09:05 |
| 500-136575-27 | 3160-45-4 (0-5') | Solid | 10/31/17 13:35 | 11/01/17 09:05 |
| 500-136575-28 | 3160-45-4 (5-6') | Solid | 10/31/17 13:40 | 11/01/17 09:05 |
| 500-136575-29 | 3160-50-1 (0-2') | Solid | 10/31/17 14:00 | 11/01/17 09:05 |
| 500-136575-30 | 3160-50-2 (0-2') | Solid | 10/31/17 14:10 | 11/01/17 09:05 |
| 500-136575-31 | 3160-50-3 (0-2') | Solid | 10/31/17 14:20 | 11/01/17 09:05 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-4 (0-4')

Lab Sample ID: 500-136575-1

Date Collected: 10/31/17 08:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.057 | | 0.017 | 0.0074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Bromomethane | <0.0043 | | 0.0043 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 2-Butanone (MEK) | <0.0043 | | 0.0043 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Carbon disulfide | <0.0043 | | 0.0043 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Chloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Chloromethane | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,2-Dichloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 2-Hexanone | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Methylene Chloride | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Vinyl acetate | <0.0043 | | 0.0043 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 12:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 95 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 12:17 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 12:17 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.036 | | 0.036 | 0.0066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Acenaphthylene | 0.0075 | J | 0.036 | 0.0048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Anthracene | <0.036 | | 0.036 | 0.0061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Benzo[a]anthracene | 0.10 | | 0.036 | 0.0049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-4 (0-4')

Lab Sample ID: 500-136575-1

Date Collected: 10/31/17 08:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.083 | | 0.036 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Benzo[b]fluoranthene | 0.078 | | 0.036 | 0.0079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Benzo[g,h,i]perylene | 0.065 | | 0.036 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Benzo[k]fluoranthene | 0.036 | | 0.036 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Bis(2-chloroethoxy)methane | <0.18 | | 0.18 | 0.037 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Bis(2-chloroethyl)ether | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.18 | | 0.18 | 0.067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 4-Bromophenyl phenyl ether | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Butyl benzyl phthalate | <0.18 | | 0.18 | 0.070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Carbazole | <0.18 | | 0.18 | 0.092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 4-Chloroaniline | <0.74 | | 0.74 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 4-Chloro-3-methylphenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Chloronaphthalene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Chlorophenol | <0.18 | | 0.18 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 4-Chlorophenyl phenyl ether | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Chrysene | 0.10 | | 0.036 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Dibenz(a,h)anthracene | 0.044 | | 0.036 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Dibenzofuran | 0.15 J | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 1,2-Dichlorobenzene | <0.18 | | 0.18 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 1,3-Dichlorobenzene | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 1,4-Dichlorobenzene | <0.18 | | 0.18 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 3,3'-Dichlorobenzidine | <0.18 | | 0.18 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4-Dichlorophenol | <0.36 | | 0.36 | 0.087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Diethyl phthalate | <0.18 | | 0.18 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4-Dimethylphenol | <0.36 | | 0.36 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Dimethyl phthalate | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Di-n-butyl phthalate | <0.18 | | 0.18 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.74 | | 0.74 | 0.29 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4-Dinitrophenol | <0.74 | | 0.74 | 0.65 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4-Dinitrotoluene | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,6-Dinitrotoluene | <0.18 | | 0.18 | 0.072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Di-n-octyl phthalate | <0.18 | | 0.18 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Fluoranthene | 0.12 | | 0.036 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Fluorene | <0.036 | | 0.036 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Hexachlorobenzene | <0.074 | | 0.074 | 0.0085 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Hexachlorobutadiene | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Hexachlorocyclopentadiene | <0.74 | | 0.74 | 0.21 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Hexachloroethane | <0.18 | | 0.18 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.051 | | 0.036 | 0.0095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Isophorone | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Methylnaphthalene | 0.34 | | 0.074 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Methylphenol | <0.18 | | 0.18 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 3 & 4 Methylphenol | <0.18 | | 0.18 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Naphthalene | 0.20 | | 0.036 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Nitroaniline | <0.18 | | 0.18 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 3-Nitroaniline | <0.36 | | 0.36 | 0.11 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 4-Nitroaniline | <0.36 | | 0.36 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Nitrobenzene | <0.036 | | 0.036 | 0.0091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Nitrophenol | <0.36 | | 0.36 | 0.087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-4 (0-4')

Lab Sample ID: 500-136575-1

Date Collected: 10/31/17 08:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.74 | | 0.74 | 0.35 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| N-Nitrosodi-n-propylamine | <0.074 | | 0.074 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| N-Nitrosodiphenylamine | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Pentachlorophenol | <0.74 | | 0.74 | 0.59 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Phenanthrene | 0.46 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Phenol | <0.18 | | 0.18 | 0.081 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Pyrene | 0.14 | | 0.036 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 1,2,4-Trichlorobenzene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4,5-Trichlorophenol | <0.36 | | 0.36 | 0.084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4,6-Trichlorophenol | <0.36 | | 0.36 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 83 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2-Fluorophenol | 102 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Nitrobenzene-d5 | 86 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Phenol-d5 | 105 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| Terphenyl-d14 | 105 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 13:13 | 1 |
| 2,4,6-Tribromophenol | 82 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 13:13 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|----------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.46 | J F2 F1 | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Arsenic | 6.1 | F2 F1 | 0.53 | 0.18 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Barium | 100 | | 0.53 | 0.061 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Beryllium | 0.48 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Cadmium | 0.26 | B | 0.11 | 0.019 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Chromium | 9.5 | F1 | 0.53 | 0.26 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Cobalt | 5.0 | | 0.27 | 0.070 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Copper | 13 | F1 | 0.53 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Iron | 16000 | B | 11 | 5.6 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Lead | 30 | | 0.27 | 0.12 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Manganese | 180 | | 0.53 | 0.078 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Nickel | 9.5 | | 0.53 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Selenium | 0.77 | F1 | 0.53 | 0.31 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Silver | <0.27 | | 0.27 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Thallium | <0.53 | F2 F1 | 0.53 | 0.27 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Vanadium | 17 | | 0.27 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |
| Zinc | 71 | F1 | 1.1 | 0.47 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:03 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Barium | 0.32 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Iron | 0.41 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-4 (0-4')

Lab Sample ID: 500-136575-1

Date Collected: 10/31/17 08:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Manganese | 0.027 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |
| Zinc | 0.053 J | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:23 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:07 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:07 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:33 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.036 | | 0.017 | 0.0058 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:05 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.9 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-3 (0-4')

Lab Sample ID: 500-136575-2

Date Collected: 10/31/17 08:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.075 | | 0.021 | 0.0092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Benzene | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Bromodichloromethane | <0.0021 | | 0.0021 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Bromoform | <0.0021 | | 0.0021 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Bromomethane | <0.0053 | | 0.0053 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 2-Butanone (MEK) | <0.0053 | | 0.0053 | 0.0023 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Carbon disulfide | <0.0053 | | 0.0053 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Carbon tetrachloride | <0.0021 | | 0.0021 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Chlorobenzene | <0.0021 | | 0.0021 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Chloroethane | <0.0053 | | 0.0053 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Chloroform | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Chloromethane | <0.0053 | | 0.0053 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| cis-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| cis-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Dibromochloromethane | <0.0021 | | 0.0021 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,1-Dichloroethane | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,2-Dichloroethane | <0.0053 | | 0.0053 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,1-Dichloroethene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,2-Dichloropropane | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,3-Dichloropropene, Total | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Ethylbenzene | <0.0021 | | 0.0021 | 0.0010 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 2-Hexanone | <0.0053 | | 0.0053 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Methylene Chloride | <0.0053 | | 0.0053 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0053 | | 0.0053 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Methyl tert-butyl ether | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Styrene | <0.0021 | | 0.0021 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0021 | | 0.0021 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Tetrachloroethene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Toluene | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| trans-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00093 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| trans-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,1,1-Trichloroethane | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,1,2-Trichloroethane | <0.0021 | | 0.0021 | 0.00090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Trichloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Vinyl acetate | <0.0053 | | 0.0053 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Vinyl chloride | <0.0021 | | 0.0021 | 0.00093 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Xylenes, Total | <0.0042 | | 0.0042 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 13:52 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 86 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Dibromofluoromethane | 96 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 13:52 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 13:52 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.037 | | 0.037 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Acenaphthylene | <0.037 | | 0.037 | 0.0049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Anthracene | <0.037 | | 0.037 | 0.0062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Benzo[a]anthracene | <0.037 | | 0.037 | 0.0050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-3 (0-4')

Lab Sample ID: 500-136575-2

Date Collected: 10/31/17 08:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.037 | | 0.037 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Benzo[b]fluoranthene | <0.037 | | 0.037 | 0.0080 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Benzo[g,h,i]perylene | <0.037 | | 0.037 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Benzo[k]fluoranthene | <0.037 | | 0.037 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.038 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 4-Chloroaniline | <0.75 | | 0.75 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 4-Chloro-3-methylphenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Chrysene | <0.037 | | 0.037 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Dibenz(a,h)anthracene | <0.037 | | 0.037 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4-Dichlorophenol | <0.37 | | 0.37 | 0.088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4-Dimethylphenol | <0.37 | | 0.37 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.75 | | 0.75 | 0.30 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4-Dinitrophenol | <0.75 | | 0.75 | 0.65 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Fluoranthene | <0.037 | | 0.037 | 0.0069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Fluorene | <0.037 | | 0.037 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Hexachlorobenzene | <0.075 | | 0.075 | 0.0086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Hexachlorocyclopentadiene | <0.75 | | 0.75 | 0.21 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.037 | | 0.037 | 0.0096 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Methylnaphthalene | <0.075 | | 0.075 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Naphthalene | <0.037 | | 0.037 | 0.0057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 3-Nitroaniline | <0.37 | | 0.37 | 0.11 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 4-Nitroaniline | <0.37 | | 0.37 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Nitrobenzene | <0.037 | | 0.037 | 0.0092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Nitrophenol | <0.37 | | 0.37 | 0.087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-3 (0-4')

Lab Sample ID: 500-136575-2

Date Collected: 10/31/17 08:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.75 | | 0.75 | 0.35 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| N-Nitrosodi-n-propylamine | <0.075 | | 0.075 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Pentachlorophenol | <0.75 | | 0.75 | 0.59 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Phenanthrene | <0.037 | | 0.037 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Phenol | <0.19 | | 0.19 | 0.082 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Pyrene | <0.037 | | 0.037 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.040 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4,5-Trichlorophenol | <0.37 | | 0.37 | 0.084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4,6-Trichlorophenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:29 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 72 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2-Fluorophenol | 76 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Phenol-d5 | 80 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| Terphenyl-d14 | 83 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 16:29 | 1 |
| 2,4,6-Tribromophenol | 91 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 16:29 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Arsenic | 7.5 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Barium | 530 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Beryllium | 0.48 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Cadmium | 0.16 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Chromium | 19 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Cobalt | 6.9 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Copper | 15 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Iron | 19000 | B | 11 | 5.8 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Lead | 13 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Manganese | 170 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Nickel | 15 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Selenium | 0.50 | J | 0.55 | 0.33 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Thallium | <0.55 | | 0.55 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Vanadium | 33 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |
| Zinc | 53 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:23 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Barium | 1.0 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Cobalt | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-3 (0-4')

Lab Sample ID: 500-136575-2

Date Collected: 10/31/17 08:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Manganese | 0.013 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Nickel | 0.018 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |
| Zinc | 0.042 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:27 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:11 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:11 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:34 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.018 | | 0.017 | 0.0057 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:07 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.9 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

Date Collected: 10/31/17 08:07

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.066 | | 0.021 | 0.0090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Benzene | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Bromodichloromethane | <0.0021 | | 0.0021 | 0.00042 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Bromoform | <0.0021 | | 0.0021 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Bromomethane | <0.0052 | | 0.0052 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 2-Butanone (MEK) | <0.0052 | | 0.0052 | 0.0023 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Carbon disulfide | <0.0052 | | 0.0052 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Carbon tetrachloride | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Chlorobenzene | <0.0021 | | 0.0021 | 0.00077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Chloroethane | <0.0052 | | 0.0052 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Chloroform | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Chloromethane | <0.0052 | | 0.0052 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| cis-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| cis-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Dibromochloromethane | <0.0021 | | 0.0021 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,1-Dichloroethane | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,2-Dichloroethane | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,1-Dichloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,2-Dichloropropane | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,3-Dichloropropane, Total | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Ethylbenzene | <0.0021 | | 0.0021 | 0.00099 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 2-Hexanone | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Methylene Chloride | <0.0052 | | 0.0052 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0052 | | 0.0052 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Methyl tert-butyl ether | <0.0021 | | 0.0021 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Styrene | <0.0021 | | 0.0021 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0021 | | 0.0021 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Tetrachloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Toluene | <0.0021 | | 0.0021 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| trans-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| trans-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,1,1-Trichloroethane | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,1,2-Trichloroethane | <0.0021 | | 0.0021 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Trichloroethene | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Vinyl acetate | <0.0052 | | 0.0052 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Vinyl chloride | <0.0021 | | 0.0021 | 0.00092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Xylenes, Total | <0.0042 | | 0.0042 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 14:17 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 14:17 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Benzo[a]anthracene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

Date Collected: 10/31/17 08:07

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 87.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Benzo[b]fluoranthene | <0.038 | | 0.038 | 0.0082 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Fluoranthene | <0.038 | | 0.038 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Methylnaphthalene | <0.077 | | 0.077 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

Date Collected: 10/31/17 08:07

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 87.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Phenanthrene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Pyrene | <0.038 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 16:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 74 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2-Fluorophenol | 88 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Nitrobenzene-d5 | 70 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Phenol-d5 | 83 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| Terphenyl-d14 | 86 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 16:54 | 1 |
| 2,4,6-Tribromophenol | 91 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 16:54 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|-------|-------|-------|---|----------------|----------------|---------|
| Antimony | <0.98 | | 0.98 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Arsenic | 7.2 | | 0.49 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Barium | 51 | | 0.49 | 0.056 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Beryllium | 0.37 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Cadmium | 0.059 | J B | 0.098 | 0.018 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Chromium | 17 | | 0.49 | 0.24 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Cobalt | 5.9 | | 0.24 | 0.064 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Copper | 13 | | 0.49 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Iron | 19000 | B | 9.8 | 5.1 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Lead | 13 | | 0.24 | 0.11 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Manganese | 170 | | 0.49 | 0.071 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Nickel | 12 | | 0.49 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Selenium | 0.74 | | 0.49 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Silver | <0.24 | | 0.24 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Thallium | 0.27 | J | 0.49 | 0.24 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Vanadium | 28 | | 0.24 | 0.058 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |
| Zinc | 58 | | 0.98 | 0.43 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:27 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Barium | 0.30 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Iron | 0.72 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

Date Collected: 10/31/17 08:07

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 87.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Manganese | 0.017 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:31 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:15 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:15 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:36 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.040 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:09 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.6 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

Date Collected: 10/31/17 08:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.029 | | 0.018 | 0.0079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00094 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00086 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 14:43 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 14:43 | 1 |
| Toluene-d8 (Surr) | 92 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 14:43 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.037 | | 0.037 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Acenaphthylene | <0.037 | | 0.037 | 0.0050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Anthracene | <0.037 | | 0.037 | 0.0063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Benzo[a]anthracene | 0.016 | J | 0.037 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

Date Collected: 10/31/17 08:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.023 | J | 0.037 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Benzo[b]fluoranthene | 0.017 | J | 0.037 | 0.0081 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Benzo[g,h,i]perylene | <0.037 | | 0.037 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Benzo[k]fluoranthene | <0.037 | | 0.037 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.038 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 4-Chloroaniline | <0.76 | | 0.76 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 4-Chloro-3-methylphenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Chrysene | 0.014 | J | 0.037 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Dibenz(a,h)anthracene | <0.037 | | 0.037 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4-Dichlorophenol | <0.37 | | 0.37 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4-Dimethylphenol | <0.37 | | 0.37 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.76 | | 0.76 | 0.30 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4-Dinitrophenol | <0.76 | | 0.76 | 0.66 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Fluoranthene | 0.018 | J | 0.037 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Fluorene | <0.037 | | 0.037 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Hexachlorobenzene | <0.076 | | 0.076 | 0.0087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Hexachlorocyclopentadiene | <0.76 | | 0.76 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.037 | | 0.037 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Methylnaphthalene | 0.013 | J | 0.076 | 0.0069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Naphthalene | <0.037 | | 0.037 | 0.0058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 3-Nitroaniline | <0.37 | | 0.37 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 4-Nitroaniline | <0.37 | | 0.37 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Nitrobenzene | <0.037 | | 0.037 | 0.0094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Nitrophenol | <0.37 | | 0.37 | 0.089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

Date Collected: 10/31/17 08:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.76 | | 0.76 | 0.36 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| N-Nitrosodi-n-propylamine | <0.076 | | 0.076 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Pentachlorophenol | <0.76 | | 0.76 | 0.60 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Phenanthrene | 0.018 | J | 0.037 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Pyrene | 0.017 | J | 0.037 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4,5-Trichlorophenol | <0.37 | | 0.37 | 0.086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4,6-Trichlorophenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 71 | | 44 - 121 | | | | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2-Fluorophenol | 82 | | 46 - 133 | | | | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | | | | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Phenol-d5 | 81 | | 46 - 125 | | | | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| Terphenyl-d14 | 87 | | 35 - 160 | | | | 11/07/17 16:14 | 11/08/17 17:20 | 1 |
| 2,4,6-Tribromophenol | 84 | | 25 - 139 | | | | 11/07/17 16:14 | 11/08/17 17:20 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Arsenic | 10 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Barium | 120 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Beryllium | 0.60 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Cadmium | 0.10 | J B | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Chromium | 16 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Cobalt | 17 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Copper | 9.3 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Iron | 17000 | B | 11 | 5.8 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Lead | 25 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Manganese | 1600 | | 2.8 | 0.41 | mg/Kg | ☼ | 11/02/17 07:49 | 11/03/17 13:52 | 5 |
| Nickel | 12 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Selenium | 0.90 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Thallium | <0.56 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Vanadium | 32 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |
| Zinc | 45 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:31 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Barium | 0.67 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Iron | 0.41 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

Date Collected: 10/31/17 08:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Manganese | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |
| Zinc | 0.030 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:35 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:19 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:19 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:37 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.041 | | 0.017 | 0.0058 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:11 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.3 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

Date Collected: 10/31/17 09:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.017 | | 0.017 | 0.0074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Bromomethane | <0.0043 | | 0.0043 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 2-Butanone (MEK) | <0.0043 | | 0.0043 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Carbon disulfide | <0.0043 | | 0.0043 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Chloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Chloromethane | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,2-Dichloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 2-Hexanone | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Methylene Chloride | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Vinyl acetate | <0.0043 | | 0.0043 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:08 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Dibromofluoromethane | 105 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 15:08 | 1 |
| Toluene-d8 (Surr) | 89 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 15:08 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.037 | | 0.037 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Acenaphthylene | <0.037 | | 0.037 | 0.0050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Anthracene | 0.043 | | 0.037 | 0.0063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Benzo[a]anthracene | 0.084 | | 0.037 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

Date Collected: 10/31/17 09:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.079 | | 0.037 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Benzo[b]fluoranthene | 0.10 | | 0.037 | 0.0081 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Benzo[g,h,i]perylene | 0.062 | | 0.037 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Benzo[k]fluoranthene | <0.037 | | 0.037 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.038 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 4-Chloroaniline | <0.76 | | 0.76 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 4-Chloro-3-methylphenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Chrysene | 0.095 | | 0.037 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Dibenz(a,h)anthracene | 0.044 | | 0.037 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4-Dichlorophenol | <0.37 | | 0.37 | 0.089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4-Dimethylphenol | <0.37 | | 0.37 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.76 | | 0.76 | 0.30 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4-Dinitrophenol | <0.76 | | 0.76 | 0.66 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Fluoranthene | 0.092 | | 0.037 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Fluorene | 0.0082 J | | 0.037 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Hexachlorobenzene | <0.076 | | 0.076 | 0.0087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Hexachlorocyclopentadiene | <0.76 | | 0.76 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.050 | | 0.037 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Methylnaphthalene | 0.26 | | 0.076 | 0.0069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Naphthalene | 0.17 | | 0.037 | 0.0058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 3-Nitroaniline | <0.37 | | 0.37 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 4-Nitroaniline | <0.37 | | 0.37 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Nitrobenzene | <0.037 | | 0.037 | 0.0094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Nitrophenol | <0.37 | | 0.37 | 0.089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

Date Collected: 10/31/17 09:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.76 | | 0.76 | 0.36 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| N-Nitrosodi-n-propylamine | <0.076 | | 0.076 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Pentachlorophenol | <0.76 | | 0.76 | 0.60 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Phenanthrene | 0.34 | | 0.037 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Pyrene | 0.11 | | 0.037 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4,5-Trichlorophenol | <0.37 | | 0.37 | 0.086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4,6-Trichlorophenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 85 | | 44 - 121 | | | | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2-Fluorophenol | 97 | | 46 - 133 | | | | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Nitrobenzene-d5 | 92 | | 41 - 120 | | | | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Phenol-d5 | 98 | | 46 - 125 | | | | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| Terphenyl-d14 | 99 | | 35 - 160 | | | | 11/07/17 16:14 | 11/08/17 13:41 | 1 |
| 2,4,6-Tribromophenol | 76 | | 25 - 139 | | | | 11/07/17 16:14 | 11/08/17 13:41 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Arsenic | 8.2 | | 0.57 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Barium | 120 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Beryllium | 0.63 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Cadmium | 0.39 | B | 0.11 | 0.021 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Chromium | 14 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Cobalt | 10 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Copper | 22 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Iron | 16000 | B | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Lead | 53 | | 0.29 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Manganese | 350 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Nickel | 15 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Selenium | 1.3 | | 0.57 | 0.34 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Thallium | <0.57 | | 0.57 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Vanadium | 24 | | 0.29 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |
| Zinc | 130 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:44 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Barium | 0.37 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Iron | 0.29 | J | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

Date Collected: 10/31/17 09:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 83.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Manganese | 0.010 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |
| Zinc | 0.095 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:47 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:23 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:23 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:39 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.058 | | 0.020 | 0.0066 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:14 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.0 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 89.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.052 | | 0.018 | 0.0077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00036 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Bromomethane | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 2-Butanone (MEK) | <0.0044 | | 0.0044 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Carbon disulfide | <0.0044 | | 0.0044 | 0.00092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Chloroethane | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Chloromethane | <0.0044 | | 0.0044 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,2-Dichloroethane | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,3-Dichloropropene, Total | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00085 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 2-Hexanone | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Methylene Chloride | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Vinyl acetate | <0.0044 | | 0.0044 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Xylenes, Total | <0.0035 | | 0.0035 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:33 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Dibromofluoromethane | 98 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 15:33 | 1 |
| Toluene-d8 (Surr) | 91 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 15:33 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.036 | | 0.036 | 0.0065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Acenaphthylene | <0.036 | | 0.036 | 0.0048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Anthracene | <0.036 | | 0.036 | 0.0060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Benzo[a]anthracene | 0.0058 | J | 0.036 | 0.0049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.015 | J | 0.036 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Benzo[b]fluoranthene | 0.0099 | J | 0.036 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Benzo[g,h,i]perylene | <0.036 | | 0.036 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Benzo[k]fluoranthene | <0.036 | | 0.036 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Bis(2-chloroethoxy)methane | <0.18 | | 0.18 | 0.037 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Bis(2-chloroethyl)ether | <0.18 | | 0.18 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.18 | | 0.18 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 4-Bromophenyl phenyl ether | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Butyl benzyl phthalate | <0.18 | | 0.18 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Carbazole | <0.18 | | 0.18 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 4-Chloroaniline | <0.73 | | 0.73 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 4-Chloro-3-methylphenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Chloronaphthalene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Chlorophenol | <0.18 | | 0.18 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 4-Chlorophenyl phenyl ether | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Chrysene | 0.0098 | J | 0.036 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Dibenz(a,h)anthracene | <0.036 | | 0.036 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Dibenzofuran | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 1,2-Dichlorobenzene | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 1,3-Dichlorobenzene | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 1,4-Dichlorobenzene | <0.18 | | 0.18 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 3,3'-Dichlorobenzidine | <0.18 | | 0.18 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4-Dichlorophenol | <0.36 | | 0.36 | 0.086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Diethyl phthalate | <0.18 | | 0.18 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4-Dimethylphenol | <0.36 | | 0.36 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Dimethyl phthalate | <0.18 | | 0.18 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Di-n-butyl phthalate | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.73 | | 0.73 | 0.29 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4-Dinitrophenol | <0.73 | | 0.73 | 0.64 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4-Dinitrotoluene | <0.18 | | 0.18 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,6-Dinitrotoluene | <0.18 | | 0.18 | 0.071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Di-n-octyl phthalate | <0.18 | | 0.18 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Fluoranthene | 0.011 | J | 0.036 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Fluorene | <0.036 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Hexachlorobenzene | <0.073 | | 0.073 | 0.0084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Hexachlorobutadiene | <0.18 | | 0.18 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Hexachlorocyclopentadiene | <0.73 | | 0.73 | 0.21 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Hexachloroethane | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.036 | | 0.036 | 0.0094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Isophorone | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Methylnaphthalene | 0.0091 | J | 0.073 | 0.0066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Methylphenol | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 3 & 4 Methylphenol | <0.18 | | 0.18 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Naphthalene | <0.036 | | 0.036 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Nitroaniline | <0.18 | | 0.18 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 3-Nitroaniline | <0.36 | | 0.36 | 0.11 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 4-Nitroaniline | <0.36 | | 0.36 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Nitrobenzene | <0.036 | | 0.036 | 0.0090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Nitrophenol | <0.36 | | 0.36 | 0.085 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.73 | | 0.73 | 0.34 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| N-Nitrosodi-n-propylamine | <0.073 | | 0.073 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| N-Nitrosodiphenylamine | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Pentachlorophenol | <0.73 | | 0.73 | 0.58 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Phenanthrene | 0.017 | J | 0.036 | 0.0050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Phenol | <0.18 | | 0.18 | 0.080 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Pyrene | 0.010 | J | 0.036 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 1,2,4-Trichlorobenzene | <0.18 | | 0.18 | 0.039 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4,5-Trichlorophenol | <0.36 | | 0.36 | 0.082 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4,6-Trichlorophenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 17:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 74 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2-Fluorophenol | 86 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Nitrobenzene-d5 | 70 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Phenol-d5 | 82 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| Terphenyl-d14 | 80 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 17:45 | 1 |
| 2,4,6-Tribromophenol | 85 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 17:45 | 1 |

Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Aldrin | <0.0019 | | 0.0019 | 0.00077 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| alpha-BHC | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| alpha-Chlordane | <0.0019 | | 0.0019 | 0.00093 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| beta-BHC | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| 4,4'-DDD | <0.0019 | | 0.0019 | 0.00037 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| 4,4'-DDE | <0.0019 | | 0.0019 | 0.00031 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| 4,4'-DDT | <0.0019 | | 0.0019 | 0.00097 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| delta-BHC | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Dieldrin | <0.0019 | | 0.0019 | 0.00025 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Endosulfan I | <0.0019 | | 0.0019 | 0.00081 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Endosulfan II | <0.0019 | | 0.0019 | 0.00030 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Endosulfan sulfate | <0.0019 | | 0.0019 | 0.00034 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Endrin | <0.0019 | | 0.0019 | 0.00026 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Endrin aldehyde | <0.0019 | | 0.0019 | 0.00031 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Endrin ketone | <0.0019 | | 0.0019 | 0.00042 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| gamma-BHC (Lindane) | <0.0019 | | 0.0019 | 0.00040 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| gamma-Chlordane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Heptachlor | <0.0019 | | 0.0019 | 0.00077 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Heptachlor epoxide | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Methoxychlor | <0.0092 | | 0.0092 | 0.00036 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Toxaphene | <0.018 | | 0.018 | 0.0078 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:39 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl | 78 | | 33 - 148 | 11/08/17 07:22 | 11/09/17 11:39 | 1 |
| Tetrachloro-m-xylene | 77 | | 30 - 121 | 11/08/17 07:22 | 11/09/17 11:39 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 89.7

Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.37 | | 0.37 | 0.077 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:21 | 10 |
| Dichlorprop | <0.37 | | 0.37 | 0.10 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:21 | 10 |
| 2,4-D | <0.37 | | 0.37 | 0.10 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:21 | 10 |
| Silvex (2,4,5-TP) | <0.37 | | 0.37 | 0.095 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:21 | 10 |
| 2,4,5-T | <0.37 | | 0.37 | 0.090 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:21 | 10 |
| 2,4-DB | <0.37 | | 0.37 | 0.11 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:21 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA | 54 | | 25 - 120 | 11/08/17 22:28 | 11/10/17 08:21 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Arsenic | 6.7 | | 0.53 | 0.18 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Barium | 68 | | 0.53 | 0.060 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Beryllium | 0.46 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Cadmium | 0.31 | B | 0.11 | 0.019 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Chromium | 12 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Cobalt | 5.8 | | 0.26 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Copper | 9.7 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Iron | 12000 | B | 11 | 5.5 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Lead | 19 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Manganese | 280 | | 0.53 | 0.077 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Nickel | 12 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Selenium | 0.41 | J | 0.53 | 0.31 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Silver | <0.26 | | 0.26 | 0.068 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Thallium | <0.53 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Vanadium | 20 | | 0.26 | 0.062 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |
| Zinc | 180 | | 1.1 | 0.46 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:48 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Barium | 0.30 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Iron | 0.22 | J | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Manganese | 0.057 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |
| Zinc | 0.35 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 89.7

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/03/17 14:57 | 11/06/17 16:27 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/03/17 14:57 | 11/06/17 16:27 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/03/17 12:20 | 11/06/17 10:40 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.031 | | 0.018 | 0.0060 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:16 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.2 | | 0.20 | 0.20 | SU | - | | 11/03/17 08:57 | 1 |

- 1
- 2
- 3
- 4
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- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.017 | | 0.017 | 0.0073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00034 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Bromomethane | <0.0042 | | 0.0042 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 2-Butanone (MEK) | <0.0042 | | 0.0042 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Carbon disulfide | <0.0042 | | 0.0042 | 0.00088 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Chloroethane | <0.0042 | | 0.0042 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Chloromethane | <0.0042 | | 0.0042 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,2-Dichloroethane | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 2-Hexanone | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Methylene Chloride | <0.0042 | | 0.0042 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0042 | | 0.0042 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Vinyl acetate | <0.0042 | | 0.0042 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 15:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 77 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 15:59 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 15:59 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Anthracene | 0.046 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Benzo[a]anthracene | 0.086 | | 0.039 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.087 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Benzo[b]fluoranthene | 0.091 | | 0.039 | 0.0085 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Benzo[g,h,i]perylene | 0.074 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Benzo[k]fluoranthene | 0.015 | J | 0.039 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 4-Chloroaniline | <0.79 | | 0.79 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Chrysene | 0.086 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Dibenz(a,h)anthracene | 0.046 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Dibenzofuran | 0.13 | J | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.79 | | 0.79 | 0.32 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4-Dinitrophenol | <0.79 | | 0.79 | 0.69 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Fluoranthene | 0.10 | | 0.039 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Hexachlorobenzene | <0.079 | | 0.079 | 0.0091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Hexachlorocyclopentadiene | <0.79 | | 0.79 | 0.23 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.054 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Methylnaphthalene | 0.25 | | 0.079 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Naphthalene | 0.12 | | 0.039 | 0.0061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.79 | | 0.79 | 0.37 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| N-Nitrosodi-n-propylamine | <0.079 | | 0.079 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Pentachlorophenol | <0.79 | | 0.79 | 0.63 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Phenanthrene | 0.34 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Phenol | <0.20 | | 0.20 | 0.087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Pyrene | 0.12 | | 0.039 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:09 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 79 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2-Fluorophenol | 89 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Nitrobenzene-d5 | 83 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Phenol-d5 | 87 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| Terphenyl-d14 | 89 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 14:09 | 1 |
| 2,4,6-Tribromophenol | 73 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 14:09 | 1 |

Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|---------|-----------|--------|--------|-------|---|----------------|----------------|---------|
| Aldrin | <0.0099 | | 0.0099 | 0.0040 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| alpha-BHC | <0.0099 | | 0.0099 | 0.0025 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| alpha-Chlordane | <0.0099 | | 0.0099 | 0.0049 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| beta-BHC | <0.0099 | | 0.0099 | 0.0030 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| 4,4'-DDD | <0.0099 | | 0.0099 | 0.0019 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| 4,4'-DDE | <0.0099 | | 0.0099 | 0.0016 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| 4,4'-DDT | <0.0099 | | 0.0099 | 0.0051 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| delta-BHC | <0.0099 | | 0.0099 | 0.0031 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Dieldrin | <0.0099 | | 0.0099 | 0.0013 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Endosulfan I | <0.0099 | | 0.0099 | 0.0043 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Endosulfan II | <0.0099 | | 0.0099 | 0.0016 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Endosulfan sulfate | <0.0099 | | 0.0099 | 0.0018 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Endrin | <0.0099 | | 0.0099 | 0.0013 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Endrin aldehyde | <0.0099 | | 0.0099 | 0.0016 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Endrin ketone | <0.0099 | | 0.0099 | 0.0022 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| gamma-BHC (Lindane) | <0.0099 | | 0.0099 | 0.0021 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| gamma-Chlordane | <0.0099 | | 0.0099 | 0.0026 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Heptachlor | <0.0099 | | 0.0099 | 0.0041 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Heptachlor epoxide | <0.0099 | | 0.0099 | 0.0035 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Methoxychlor | <0.048 | | 0.048 | 0.0019 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Toxaphene | <0.097 | | 0.097 | 0.041 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 21:54 | 5 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl | 98 | | 33 - 148 | 11/08/17 07:22 | 11/08/17 21:54 | 5 |
| Tetrachloro-m-xylene | 95 | | 30 - 121 | 11/08/17 07:22 | 11/08/17 21:54 | 5 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.40 | | 0.40 | 0.082 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:45 | 10 |
| Dichlorprop | <0.40 | | 0.40 | 0.11 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:45 | 10 |
| 2,4-D | <0.40 | | 0.40 | 0.11 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:45 | 10 |
| Silvex (2,4,5-TP) | <0.40 | | 0.40 | 0.10 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:45 | 10 |
| 2,4,5-T | <0.40 | | 0.40 | 0.097 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:45 | 10 |
| 2,4-DB | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/08/17 22:28 | 11/10/17 08:45 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA | 51 | | 25 - 120 | 11/08/17 22:28 | 11/10/17 08:45 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Arsenic | 5.8 | | 0.60 | 0.21 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Barium | 130 | | 0.60 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Beryllium | 0.50 | | 0.24 | 0.056 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Cadmium | 0.50 | B | 0.12 | 0.022 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Chromium | 14 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Cobalt | 8.2 | | 0.30 | 0.079 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Copper | 19 | | 0.60 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Iron | 12000 | B | 12 | 6.3 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Lead | 100 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Manganese | 320 | | 0.60 | 0.088 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Nickel | 16 | | 0.60 | 0.18 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Selenium | 0.67 | | 0.60 | 0.35 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Silver | <0.30 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Thallium | <0.60 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Vanadium | 18 | | 0.30 | 0.071 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |
| Zinc | 91 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:52 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Barium | 0.85 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Cadmium | 0.0020 | J | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Manganese | 0.077 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |
| Zinc | 0.058 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:55 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/03/17 14:57 | 11/06/17 16:31 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/03/17 14:57 | 11/06/17 16:31 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/03/17 12:20 | 11/06/17 10:42 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.046 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:29 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.1 | | 0.20 | 0.20 | SU | - | | 11/03/17 08:57 | 1 |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.039 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Bromomethane | <0.0051 | | 0.0051 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 2-Butanone (MEK) | <0.0051 | | 0.0051 | 0.0022 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Carbon disulfide | <0.0051 | | 0.0051 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Chloroethane | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Chloromethane | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,2-Dichloroethane | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00097 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 2-Hexanone | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Methylene Chloride | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Vinyl acetate | <0.0051 | | 0.0051 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:24 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 75 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Dibromofluoromethane | 97 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 16:24 | 1 |
| Toluene-d8 (Surr) | 99 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 16:24 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.70 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Methylnaphthalene | <0.081 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.64 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Phenanthrene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 83 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2-Fluorophenol | 86 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Nitrobenzene-d5 | 70 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Phenol-d5 | 93 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| Terphenyl-d14 | 85 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 18:10 | 1 |
| 2,4,6-Tribromophenol | 93 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 18:10 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Arsenic | 7.8 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Barium | 76 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Beryllium | 0.52 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Cadmium | 0.18 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Chromium | 20 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Cobalt | 11 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Copper | 16 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Iron | 20000 | B | 11 | 5.8 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Lead | 17 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Manganese | 560 | | 0.56 | 0.081 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Nickel | 16 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Selenium | 0.93 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Thallium | <0.56 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Vanadium | 31 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |
| Zinc | 110 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 20:56 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Barium | 0.35 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Cadmium | 0.0031 | J | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Copper | 0.013 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Manganese | 4.8 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Nickel | 0.032 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |
| Zinc | 0.25 J | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:59 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.43 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:53 | 11/06/17 02:24 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:44 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:44 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:16 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.048 | | 0.021 | 0.0069 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:31 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.8 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.024 | | 0.018 | 0.0080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00095 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,3-Dichloropropene, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00088 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 16:49 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 76 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 16:49 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 16:49 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Benzo[a]anthracene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.038 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Benzo[b]fluoranthene | <0.038 | | 0.038 | 0.0082 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Fluoranthene | <0.038 | | 0.038 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Methylnaphthalene | <0.077 | | 0.077 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Phenanthrene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Pyrene | <0.038 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 18:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 87 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2-Fluorophenol | 100 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Nitrobenzene-d5 | 77 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Phenol-d5 | 104 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| Terphenyl-d14 | 89 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 18:35 | 1 |
| 2,4,6-Tribromophenol | 106 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 18:35 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|-------|-------|-------|---|----------------|----------------|---------|
| Antimony | <0.98 | | 0.98 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Arsenic | 9.2 | | 0.49 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Barium | 100 | | 0.49 | 0.056 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Beryllium | 0.46 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Cadmium | 0.089 | J B | 0.098 | 0.018 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Chromium | 19 | | 0.49 | 0.24 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Cobalt | 6.7 | | 0.25 | 0.064 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Copper | 16 | | 0.49 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Iron | 21000 | B | 9.8 | 5.1 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Lead | 14 | | 0.25 | 0.11 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Manganese | 220 | | 0.49 | 0.071 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Nickel | 15 | | 0.49 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Selenium | 0.66 | | 0.49 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Silver | <0.25 | | 0.25 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Thallium | <0.49 | | 0.49 | 0.24 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Vanadium | 32 | | 0.25 | 0.058 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |
| Zinc | 55 | | 0.98 | 0.43 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:00 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Barium | 0.33 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Manganese | 0.018 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:03 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:52 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:52 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:17 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.023 | | 0.018 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:34 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.8 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

Date Collected: 10/31/17 10:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.042 | | 0.020 | 0.0087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:14 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 17:14 | 1 |
| Toluene-d8 (Surr) | 91 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 17:14 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Benzo[a]anthracene | <0.038 | | 0.038 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

Date Collected: 10/31/17 10:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.038 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Benzo[b]fluoranthene | <0.038 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.097 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Fluoranthene | <0.038 | | 0.038 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Methylnaphthalene | <0.078 | | 0.078 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0097 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

Date Collected: 10/31/17 10:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Phenanthrene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Phenol | <0.19 | | 0.19 | 0.086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Pyrene | <0.038 | | 0.038 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 84 | | 44 - 121 | | | | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2-Fluorophenol | 94 | | 46 - 133 | | | | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Nitrobenzene-d5 | 79 | | 41 - 120 | | | | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Phenol-d5 | 102 | | 46 - 125 | | | | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| Terphenyl-d14 | 87 | | 35 - 160 | | | | 11/07/17 16:14 | 11/08/17 19:00 | 1 |
| 2,4,6-Tribromophenol | 99 | | 25 - 139 | | | | 11/07/17 16:14 | 11/08/17 19:00 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Arsenic | 6.4 | | 0.59 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Barium | 53 | | 0.59 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Beryllium | 0.43 | | 0.23 | 0.055 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Cadmium | 0.065 | J B | 0.12 | 0.021 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Chromium | 20 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Cobalt | 6.5 | | 0.29 | 0.077 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Copper | 15 | | 0.59 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Iron | 20000 | B | 12 | 6.1 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Lead | 12 | | 0.29 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Manganese | 140 | | 0.59 | 0.085 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Nickel | 15 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Selenium | <0.59 | | 0.59 | 0.34 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Silver | <0.29 | | 0.29 | 0.076 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Thallium | <0.59 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Vanadium | 30 | | 0.29 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |
| Zinc | 60 | | 1.2 | 0.52 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:03 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Barium | 0.15 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Cobalt | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

Date Collected: 10/31/17 10:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Manganese | 0.10 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Nickel | 0.027 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |
| Zinc | 0.027 J | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:07 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 16:56 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 16:56 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:19 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.022 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:36 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.3 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

Date Collected: 10/31/17 10:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.041 | | 0.017 | 0.0076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Bromomethane | <0.0044 | | 0.0044 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 2-Butanone (MEK) | <0.0044 | | 0.0044 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Carbon disulfide | <0.0044 | | 0.0044 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Chloroethane | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Chloromethane | <0.0044 | | 0.0044 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,2-Dichloroethane | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 2-Hexanone | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Methylene Chloride | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Vinyl acetate | <0.0044 | | 0.0044 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Xylenes, Total | <0.0035 | | 0.0035 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 17:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 17:40 | 1 |
| Toluene-d8 (Surr) | 92 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 17:40 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Benzo[a]anthracene | 0.0078 | J | 0.038 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

Date Collected: 10/31/17 10:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.022 | J | 0.038 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Benzo[b]fluoranthene | 0.025 | J | 0.038 | 0.0083 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Chrysene | 0.012 | J | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.68 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Fluoranthene | <0.038 | | 0.038 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Methylnaphthalene | <0.077 | | 0.077 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

Date Collected: 10/31/17 10:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.37 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.62 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Phenanthrene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Pyrene | 0.0083 | J | 0.038 | 0.0076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:25 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 74 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2-Fluorophenol | 84 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Nitrobenzene-d5 | 70 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Phenol-d5 | 88 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| Terphenyl-d14 | 81 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 19:25 | 1 |
| 2,4,6-Tribromophenol | 92 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 19:25 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Arsenic | 9.5 | | 0.57 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Barium | 92 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Beryllium | 0.52 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Cadmium | 0.097 | J B | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Chromium | 19 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Cobalt | 11 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Copper | 16 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Iron | 21000 | B | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Lead | 21 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Manganese | 540 | | 0.57 | 0.082 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Nickel | 14 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Selenium | 0.86 | | 0.57 | 0.33 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Silver | <0.28 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Vanadium | 36 | | 0.28 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |
| Zinc | 58 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:07 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Cobalt | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

Date Collected: 10/31/17 10:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Manganese | 0.85 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Nickel | 0.019 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |
| Zinc | 0.053 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:11 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.14 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:53 | 11/06/17 02:44 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:00 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:00 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:20 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.063 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:38 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.0 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Bromomethane | <0.0051 | | 0.0051 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 2-Butanone (MEK) | <0.0051 | | 0.0051 | 0.0023 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Carbon disulfide | <0.0051 | | 0.0051 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Chloroethane | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Chloromethane | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,2-Dichloroethane | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00097 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 2-Hexanone | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Methylene Chloride | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Vinyl acetate | <0.0051 | | 0.0051 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Xylenes, Total | <0.0041 | | 0.0041 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 12:34 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Dibromofluoromethane | 98 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 12:34 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 12:34 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Methylnaphthalene | <0.081 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.64 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Phenanthrene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0080 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 19:50 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 79 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2-Fluorophenol | 93 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Nitrobenzene-d5 | 73 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Phenol-d5 | 100 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| Terphenyl-d14 | 86 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 19:50 | 1 |
| 2,4,6-Tribromophenol | 96 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 19:50 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Arsenic | 8.1 | | 0.58 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Barium | 74 | | 0.58 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Beryllium | 0.51 | | 0.23 | 0.055 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Cadmium | 0.085 | J B | 0.12 | 0.021 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Chromium | 21 | | 0.58 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Cobalt | 7.2 | | 0.29 | 0.077 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Copper | 18 | | 0.58 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Iron | 22000 | B | 12 | 6.1 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Lead | 13 | | 0.29 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Manganese | 140 | | 0.58 | 0.085 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Nickel | 19 | | 0.58 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Selenium | 0.89 | | 0.58 | 0.34 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Silver | <0.29 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Thallium | <0.58 | | 0.58 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Vanadium | 35 | | 0.29 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |
| Zinc | 56 | | 1.2 | 0.51 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:11 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Cobalt | 0.018 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Manganese | 0.74 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Nickel | 0.024 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |
| Zinc | 0.025 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:15 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.099 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:53 | 11/06/17 02:48 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:04 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:04 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:22 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.031 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:40 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.3 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

Date Collected: 10/31/17 10:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.045 | | 0.021 | 0.0090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Benzene | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Bromodichloromethane | <0.0021 | | 0.0021 | 0.00042 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Bromoform | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Bromomethane | <0.0052 | | 0.0052 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 2-Butanone (MEK) | <0.0052 | | 0.0052 | 0.0023 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Carbon disulfide | <0.0052 | | 0.0052 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Carbon tetrachloride | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Chlorobenzene | <0.0021 | | 0.0021 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Chloroethane | <0.0052 | | 0.0052 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Chloroform | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Chloromethane | <0.0052 | | 0.0052 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| cis-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| cis-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Dibromochloromethane | <0.0021 | | 0.0021 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,1-Dichloroethane | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,2-Dichloroethane | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,1-Dichloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,2-Dichloropropane | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,3-Dichloropropane, Total | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Ethylbenzene | <0.0021 | | 0.0021 | 0.00099 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 2-Hexanone | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Methylene Chloride | <0.0052 | | 0.0052 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0052 | | 0.0052 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Methyl tert-butyl ether | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Styrene | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0021 | | 0.0021 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Tetrachloroethene | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Toluene | <0.0021 | | 0.0021 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| trans-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| trans-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,1,1-Trichloroethane | <0.0021 | | 0.0021 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,1,2-Trichloroethane | <0.0021 | | 0.0021 | 0.00088 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Trichloroethene | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Vinyl acetate | <0.0052 | | 0.0052 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Vinyl chloride | <0.0021 | | 0.0021 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Xylenes, Total | <0.0041 | | 0.0041 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:30 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 85 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 18:30 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 18:30 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Benzo[a]anthracene | 0.0085 | J | 0.038 | 0.0052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

Date Collected: 10/31/17 10:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.018 | J | 0.038 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Benzo[b]fluoranthene | 0.010 | J | 0.038 | 0.0084 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.040 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.097 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Fluoranthene | 0.0093 | J | 0.038 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Methylnaphthalene | 0.018 | J | 0.078 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Naphthalene | 0.011 | J | 0.038 | 0.0060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0097 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

Date Collected: 10/31/17 10:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Phenanthrene | 0.021 | J | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Phenol | <0.19 | | 0.19 | 0.086 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Pyrene | 0.0099 | J | 0.038 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 69 | | 44 - 121 | | | | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2-Fluorophenol | 86 | | 46 - 133 | | | | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Nitrobenzene-d5 | 65 | | 41 - 120 | | | | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Phenol-d5 | 86 | | 46 - 125 | | | | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| Terphenyl-d14 | 76 | | 35 - 160 | | | | 11/07/17 16:14 | 11/08/17 21:06 | 1 |
| 2,4,6-Tribromophenol | 82 | | 25 - 139 | | | | 11/07/17 16:14 | 11/08/17 21:06 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Arsenic | 7.4 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Barium | 120 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Beryllium | 0.52 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Cadmium | 0.12 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Chromium | 18 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Cobalt | 8.7 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Copper | 16 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Iron | 21000 | B | 11 | 5.8 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Lead | 23 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Manganese | 270 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Nickel | 17 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Selenium | 0.63 | | 0.55 | 0.33 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Silver | <0.28 | | 0.28 | 0.071 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Thallium | <0.55 | | 0.55 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Vanadium | 30 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |
| Zinc | 63 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:15 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Barium | 0.58 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

Date Collected: 10/31/17 10:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Manganese | 0.25 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Nickel | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Selenium | 0.020 | J | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |
| Zinc | 0.035 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:19 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.075 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:53 | 11/06/17 02:52 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:08 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:08 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:23 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.035 | | 0.018 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:43 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.9 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

Date Collected: 10/31/17 10:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.032 | | 0.018 | 0.0080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00095 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 18:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 84 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Dibromofluoromethane | 97 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 18:55 | 1 |
| Toluene-d8 (Surr) | 99 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 18:55 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Anthracene | 0.073 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Benzo[a]anthracene | 0.15 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

Date Collected: 10/31/17 10:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.089 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Benzo[b]fluoranthene | 0.11 | | 0.040 | 0.0087 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Benzo[g,h,i]perylene | 0.072 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Benzo[k]fluoranthene | 0.012 | J | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Chrysene | 0.16 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Dibenz(a,h)anthracene | 0.053 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Dibenzofuran | 0.74 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Fluoranthene | 0.17 | | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Fluorene | 0.028 | J | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.062 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2-Methylphenol | 0.56 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 3 & 4 Methylphenol | 0.46 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Naphthalene | 2.5 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

Date Collected: 10/31/17 10:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.64 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Phenanthrene | 0.97 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Phenol | 0.41 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Pyrene | 0.19 | | 0.040 | 0.0080 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 91 | | 44 - 121 | | | | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2-Fluorophenol | 101 | | 46 - 133 | | | | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Nitrobenzene-d5 | 90 | | 41 - 120 | | | | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Phenol-d5 | 100 | | 46 - 125 | | | | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| Terphenyl-d14 | 111 | | 35 - 160 | | | | 11/07/17 16:14 | 11/08/17 14:37 | 1 |
| 2,4,6-Tribromophenol | 83 | | 25 - 139 | | | | 11/07/17 16:14 | 11/08/17 14:37 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------------|------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| 2-Methylnaphthalene | 3.7 | | 0.16 | 0.015 | mg/Kg | ☼ | 11/07/17 16:14 | 11/09/17 13:20 | 2 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Arsenic | 11 | | 0.52 | 0.18 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Barium | 84 | | 0.52 | 0.059 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Beryllium | 0.32 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Cadmium | 0.095 | J B | 0.10 | 0.019 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Chromium | 13 | | 0.52 | 0.25 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Cobalt | 2.7 | | 0.26 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Copper | 9.7 | | 0.52 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Iron | 16000 | B | 10 | 5.4 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Lead | 45 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Manganese | 65 | | 0.52 | 0.075 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Nickel | 7.4 | | 0.52 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Selenium | 1.9 | | 0.52 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Silver | <0.26 | | 0.26 | 0.066 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Thallium | 0.87 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Vanadium | 28 | | 0.26 | 0.061 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |
| Zinc | 32 | | 1.0 | 0.45 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:19 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Barium | 0.33 | J | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

Date Collected: 10/31/17 10:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 80.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Manganese | 0.84 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |
| Zinc | 0.037 J | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:23 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.44 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:53 | 11/06/17 02:56 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:12 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:12 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:27 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.14 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:45 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 3.8 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

Date Collected: 10/31/17 11:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.0010 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 19:21 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 19:21 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

Date Collected: 10/31/17 11:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.016 | J | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.070 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.049 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.097 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.72 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.080 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0076 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0094 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.23 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Methylnaphthalene | 0.0097 | J | 0.082 | 0.0075 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0063 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

Date Collected: 10/31/17 11:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.65 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Phenanthrene | 0.0097 | J | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0081 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.093 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 16:14 | 11/08/17 21:31 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 68 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2-Fluorophenol | 82 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Nitrobenzene-d5 | 63 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Phenol-d5 | 84 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| Terphenyl-d14 | 78 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 21:31 | 1 |
| 2,4,6-Tribromophenol | 65 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 21:31 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0066 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0079 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0043 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0099 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 18:49 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 83 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 18:49 | 1 |
| DCB Decachlorobiphenyl | 95 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 18:49 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Arsenic | 5.1 | | 0.57 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Barium | 120 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Beryllium | 0.42 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Cadmium | 0.088 | J B | 0.11 | 0.021 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Chromium | 12 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Cobalt | 9.1 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Copper | 14 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Iron | 14000 | B | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Lead | 21 | | 0.29 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Manganese | 660 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Nickel | 10 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Selenium | 1.1 | | 0.57 | 0.34 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

Date Collected: 10/31/17 11:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.4

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.57 | | 0.57 | 0.29 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Vanadium | 21 | | 0.29 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |
| Zinc | 40 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:32 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Barium | 0.61 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Selenium | 0.021 J | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:35 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:17 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:17 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:29 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.039 | | 0.018 | 0.0061 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:52 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.4 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.025 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00042 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Bromomethane | <0.0051 | | 0.0051 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 2-Butanone (MEK) | <0.0051 | | 0.0051 | 0.0023 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Carbon disulfide | <0.0051 | | 0.0051 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Chloroethane | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Chloromethane | <0.0051 | | 0.0051 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,2-Dichloroethane | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00098 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 2-Hexanone | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Methylene Chloride | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00088 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Vinyl acetate | <0.0051 | | 0.0051 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Xylenes, Total | <0.0041 | | 0.0041 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 19:46 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 19:46 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 19:46 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Anthracene | 0.0086 | J | 0.040 | 0.0068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Benzo[a]anthracene | 0.023 | J B | 0.040 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.017 | J | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Benzo[b]fluoranthene | 0.038 | J | 0.040 | 0.0088 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Benzo[g,h,i]perylene | 0.019 | J F1 | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Benzo[k]fluoranthene | 0.016 | J | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Chrysene | 0.035 | J | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | F1 F2 | 0.20 | 0.057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.72 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Fluoranthene | 0.028 | J | 0.040 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0094 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Methylnaphthalene | 0.051 | J F1 | 0.082 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Naphthalene | 0.027 | J | 0.040 | 0.0063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|----------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.65 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Phenanthrene | 0.057 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Pyrene | 0.034 J | | 0.040 | 0.0081 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.093 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 86 | | 44 - 121 | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2-Fluorophenol | 100 | | 46 - 133 | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Nitrobenzene-d5 | 94 | | 41 - 120 | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Phenol-d5 | 95 | | 46 - 125 | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| Terphenyl-d14 | 93 | | 35 - 160 | 11/07/17 07:18 | 11/07/17 21:15 | 1 |
| 2,4,6-Tribromophenol | 65 | | 25 - 139 | 11/07/17 07:18 | 11/07/17 21:15 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0090 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0080 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0044 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.010 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:04 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 80 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 19:04 | 1 |
| DCB Decachlorobiphenyl | 100 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 19:04 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Arsenic | 14 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Barium | 280 | | 0.61 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Beryllium | 1.0 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Cadmium | 0.14 B | | 0.12 | 0.022 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Chromium | 30 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Cobalt | 15 | | 0.30 | 0.080 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Copper | 20 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Iron | 35000 B | | 12 | 6.3 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Lead | 31 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Manganese | 1600 | | 3.0 | 0.44 | mg/Kg | ☼ | 11/02/17 07:49 | 11/03/17 13:56 | 5 |
| Nickel | 17 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Selenium | 1.7 | | 0.61 | 0.36 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Silver | <0.30 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.1

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.61 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Vanadium | 35 | | 0.30 | 0.072 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |
| Zinc | 54 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:36 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Barium | 0.78 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:39 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:21 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:21 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:30 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.050 | | 0.020 | 0.0065 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:54 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.6 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.093 | | 0.018 | 0.0078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00036 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00093 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00086 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:11 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 101 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 20:11 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 20:11 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Benzo[a]anthracene | 0.010 | J B | 0.039 | 0.0052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.0097 | J | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Benzo[b]fluoranthene | 0.017 | J | 0.039 | 0.0084 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Chrysene | 0.011 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Fluoranthene | 0.014 | J | 0.039 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Methylnaphthalene | 0.015 | J | 0.078 | 0.0071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Naphthalene | 0.0069 | J | 0.039 | 0.0060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Phenanthrene | 0.022 | J | 0.039 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Phenol | <0.20 | | 0.20 | 0.086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Pyrene | 0.019 | J | 0.039 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 89 | | 44 - 121 | | | | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2-Fluorophenol | 95 | | 46 - 133 | | | | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Nitrobenzene-d5 | 96 | | 41 - 120 | | | | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Phenol-d5 | 96 | | 46 - 125 | | | | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| Terphenyl-d14 | 93 | | 35 - 160 | | | | 11/07/17 07:18 | 11/07/17 21:42 | 1 |
| 2,4,6-Tribromophenol | 66 | | 25 - 139 | | | | 11/07/17 07:18 | 11/07/17 21:42 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| PCB-1016 | <0.020 | | 0.020 | 0.0072 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0067 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0080 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0044 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0099 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| Tetrachloro-m-xylene | 87 | | 49 - 129 | | | | 11/07/17 16:20 | 11/10/17 19:19 | 1 |
| DCB Decachlorobiphenyl | 101 | | 37 - 121 | | | | 11/07/17 16:20 | 11/10/17 19:19 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Arsenic | 9.9 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Barium | 1100 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Beryllium | 0.74 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Cadmium | 0.48 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Chromium | 17 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Cobalt | 15 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Copper | 15 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Iron | 25000 | B | 11 | 5.7 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Lead | 44 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Manganese | 480 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Nickel | 16 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Selenium | 0.83 | | 0.55 | 0.32 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Silver | <0.28 | | 0.28 | 0.071 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.3

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.55 | | 0.55 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Vanadium | 24 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |
| Zinc | 110 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:40 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Barium | 1.2 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Manganese | 0.065 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |
| Zinc | 0.029 J | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:44 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:37 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:37 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:32 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.043 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:56 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.7 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

Date Collected: 10/31/17 11:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.034 | | 0.019 | 0.0083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00099 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,3-Dichloropropene, Total | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 20:36 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 20:36 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 20:36 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Anthracene | 0.11 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Benzo[a]anthracene | 0.17 | B | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

Date Collected: 10/31/17 11:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.084 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Benzo[b]fluoranthene | 0.095 | | 0.040 | 0.0086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Benzo[k]fluoranthene | 0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Chrysene | 0.19 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Dibenzofuran | 0.27 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Fluoranthene | 0.17 | | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Methylnaphthalene | 0.65 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Naphthalene | 0.32 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

Date Collected: 10/31/17 11:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.64 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Phenanthrene | 1.2 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Pyrene | 0.22 | | 0.040 | 0.0080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 91 | | 44 - 121 | | | | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2-Fluorophenol | 99 | | 46 - 133 | | | | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Nitrobenzene-d5 | 91 | | 41 - 120 | | | | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Phenol-d5 | 103 | | 46 - 125 | | | | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| Terphenyl-d14 | 89 | | 35 - 160 | | | | 11/07/17 07:18 | 11/07/17 22:08 | 1 |
| 2,4,6-Tribromophenol | 78 | | 25 - 139 | | | | 11/07/17 07:18 | 11/07/17 22:08 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| PCB-1016 | <0.020 | | 0.020 | 0.0071 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0066 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0080 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0044 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0099 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| Tetrachloro-m-xylene | 75 | | 49 - 129 | | | | 11/07/17 16:20 | 11/10/17 19:35 | 1 |
| DCB Decachlorobiphenyl | 86 | | 37 - 121 | | | | 11/07/17 16:20 | 11/10/17 19:35 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Arsenic | 11 | | 0.57 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Barium | 150 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Beryllium | 0.56 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Cadmium | 0.22 | B | 0.11 | 0.021 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Chromium | 14 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Cobalt | 4.7 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Copper | 19 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Iron | 26000 | B | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Lead | 41 | | 0.29 | 0.13 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Manganese | 110 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Nickel | 11 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Selenium | 1.7 | | 0.57 | 0.34 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

Date Collected: 10/31/17 11:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Vanadium | 22 | | 0.29 | 0.067 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |
| Zinc | 61 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:44 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Barium | 0.57 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Iron | 0.23 J | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Manganese | 0.026 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Selenium | 0.020 J | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |
| Zinc | 0.022 J | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:48 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:41 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:41 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:33 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.11 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 08:58 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.7 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

Date Collected: 10/31/17 11:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00036 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Bromomethane | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 2-Butanone (MEK) | <0.0044 | | 0.0044 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Carbon disulfide | <0.0044 | | 0.0044 | 0.00092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Chloroethane | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Chloromethane | <0.0044 | | 0.0044 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,2-Dichloroethane | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00085 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 2-Hexanone | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Methylene Chloride | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Vinyl acetate | <0.0044 | | 0.0044 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Xylenes, Total | <0.0035 | | 0.0035 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:01 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 21:01 | 1 |
| Toluene-d8 (Surr) | 83 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 21:01 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Anthracene | 0.0077 | J | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Benzo[a]anthracene | 0.020 | J B | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

Date Collected: 10/31/17 11:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.012 | J | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Benzo[b]fluoranthene | 0.019 | J | 0.040 | 0.0087 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Chrysene | 0.027 | J | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Fluoranthene | 0.023 | J | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Methylnaphthalene | 0.039 | J | 0.081 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Naphthalene | 0.018 | J | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

Date Collected: 10/31/17 11:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.64 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Phenanthrene | 0.087 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Pyrene | 0.024 | J | 0.040 | 0.0080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 22:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 89 | | 44 - 121 | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2-Fluorophenol | 99 | | 46 - 133 | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Nitrobenzene-d5 | 100 | | 41 - 120 | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Phenol-d5 | 95 | | 46 - 125 | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| Terphenyl-d14 | 90 | | 35 - 160 | 11/07/17 07:18 | 11/07/17 22:35 | 1 |
| 2,4,6-Tribromophenol | 73 | | 25 - 139 | 11/07/17 07:18 | 11/07/17 22:35 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.019 | | 0.019 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| PCB-1221 | <0.019 | | 0.019 | 0.0085 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| PCB-1232 | <0.019 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| PCB-1242 | <0.019 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| PCB-1248 | <0.019 | | 0.019 | 0.0076 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| PCB-1254 | <0.019 | | 0.019 | 0.0042 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| PCB-1260 | <0.019 | | 0.019 | 0.0095 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 19:50 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 77 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 19:50 | 1 |
| DCB Decachlorobiphenyl | 88 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 19:50 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Arsenic | 7.1 | | 0.60 | 0.20 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Barium | 85 | | 0.60 | 0.068 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Beryllium | 0.49 | | 0.24 | 0.056 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Cadmium | 0.19 | B | 0.12 | 0.022 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Chromium | 16 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Cobalt | 5.8 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Copper | 23 | | 0.60 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Iron | 19000 | B | 12 | 6.2 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Lead | 32 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Manganese | 180 | | 0.60 | 0.087 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Nickel | 14 | | 0.60 | 0.17 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Selenium | 0.55 | J | 0.60 | 0.35 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Silver | <0.30 | | 0.30 | 0.077 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

Date Collected: 10/31/17 11:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.8

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.60 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Vanadium | 26 | | 0.30 | 0.071 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |
| Zinc | 82 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:48 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Barium | 0.52 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Copper | 0.010 | J | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Manganese | 0.080 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Selenium | 0.020 | J | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |
| Zinc | 0.067 | J | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 17:52 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 17:45 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 17:45 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 11:35 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.048 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:01 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.9 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.066 | | 0.019 | 0.0083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.00099 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00091 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/02/17 21:26 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 12:59 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 12:59 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 12:59 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/01/17 18:01 | 11/02/17 21:26 | 1 |
| Toluene-d8 (Surr) | 86 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 12:59 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Anthracene | 0.0076 | J | 0.038 | 0.0064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Benzo[a]anthracene | 0.018 | J B | 0.038 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Benzo[a]pyrene | 0.0089 | J | 0.038 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Benzo[b]fluoranthene | 0.013 | J | 0.038 | 0.0082 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Chrysene | 0.020 | J | 0.038 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Fluoranthene | 0.017 | J | 0.038 | 0.0071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0088 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.0099 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Methylnaphthalene | 0.033 | J | 0.077 | 0.0070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Naphthalene | 0.017 | J | 0.038 | 0.0059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Phenanthrene | 0.082 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Pyrene | 0.023 J | | 0.038 | 0.0076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 90 | | 44 - 121 | | | | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2-Fluorophenol | 98 | | 46 - 133 | | | | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Nitrobenzene-d5 | 93 | | 41 - 120 | | | | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | | | | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| Terphenyl-d14 | 93 | | 35 - 160 | | | | 11/07/17 07:18 | 11/07/17 23:01 | 1 |
| 2,4,6-Tribromophenol | 71 | | 25 - 139 | | | | 11/07/17 07:18 | 11/07/17 23:01 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| PCB-1016 | <0.019 | | 0.019 | 0.0068 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| PCB-1221 | <0.019 | | 0.019 | 0.0085 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| PCB-1232 | <0.019 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| PCB-1242 | <0.019 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| PCB-1248 | <0.019 | | 0.019 | 0.0076 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| PCB-1254 | <0.019 | | 0.019 | 0.0042 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| PCB-1260 | <0.019 | | 0.019 | 0.0094 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| Tetrachloro-m-xylene | 71 | | 49 - 129 | | | | 11/07/17 16:20 | 11/10/17 20:05 | 1 |
| DCB Decachlorobiphenyl | 87 | | 37 - 121 | | | | 11/07/17 16:20 | 11/10/17 20:05 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Arsenic | 9.1 | | 0.53 | 0.18 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Barium | 83 | | 0.53 | 0.060 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Beryllium | 0.44 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Cadmium | 0.13 B | | 0.11 | 0.019 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Chromium | 17 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Cobalt | 5.4 | | 0.27 | 0.069 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Copper | 16 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Iron | 21000 B | | 11 | 5.5 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Lead | 21 | | 0.27 | 0.12 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Manganese | 190 | | 0.53 | 0.077 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Nickel | 11 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Selenium | 0.60 | | 0.53 | 0.31 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Silver | <0.27 | | 0.27 | 0.068 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Thallium | <0.53 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Vanadium | 30 | | 0.27 | 0.063 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |
| Zinc | 62 | | 1.1 | 0.47 | mg/Kg | ☼ | 11/02/17 07:49 | 11/02/17 21:52 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Cobalt | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Manganese | 0.99 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Nickel | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |
| Zinc | 0.14 | J | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:44 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.17 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:56 | 11/06/17 00:33 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:10 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:10 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 08:56 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.035 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:03 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.6 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

Date Collected: 10/31/17 12:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.030 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00097 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,3-Dichloropropene, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:25 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 13:25 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 13:25 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

Date Collected: 10/31/17 12:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Methylnaphthalene | <0.080 | | 0.080 | 0.0073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.0099 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.094 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

Date Collected: 10/31/17 12:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Phenanthrene | <0.040 | | 0.040 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 87 | | 44 - 121 | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2-Fluorophenol | 94 | | 46 - 133 | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Nitrobenzene-d5 | 101 | | 41 - 120 | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Phenol-d5 | 82 | | 46 - 125 | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| Terphenyl-d14 | 98 | | 35 - 160 | 11/07/17 07:18 | 11/07/17 23:28 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | 11/07/17 07:18 | 11/07/17 23:28 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0087 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0065 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0043 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0097 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 86 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 20:21 | 1 |
| DCB Decachlorobiphenyl | 92 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 20:21 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.40 | J | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Arsenic | 7.5 | | 0.57 | 0.20 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Barium | 81 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Beryllium | 0.65 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Cadmium | 0.088 | J | 0.11 | 0.021 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Chromium | 17 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Cobalt | 9.8 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Copper | 10 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Iron | 20000 | | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Lead | 13 | | 0.29 | 0.13 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Manganese | 400 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Nickel | 13 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Selenium | 0.55 | J | 0.57 | 0.34 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

Date Collected: 10/31/17 12:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.57 | | 0.57 | 0.29 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Vanadium | 29 | | 0.29 | 0.067 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |
| Zinc | 38 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 17:57 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Barium | 1.1 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Manganese | 0.019 | J | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:48 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:14 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:14 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:03 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.023 | | 0.018 | 0.0061 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:10 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.0 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

Date Collected: 10/31/17 13:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.074 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00097 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 13:50 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 95 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 13:50 | 1 |
| Toluene-d8 (Surr) | 102 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 13:50 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Benzo[a]anthracene | 0.0080 | J B | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

Date Collected: 10/31/17 13:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.0085 | J | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Benzo[b]fluoranthene | 0.015 | J | 0.040 | 0.0087 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Fluoranthene | 0.013 | J | 0.040 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Methylnaphthalene | <0.081 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

Date Collected: 10/31/17 13:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.65 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Phenanthrene | 0.012 | J | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Pyrene | 0.015 | J | 0.040 | 0.0080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 86 | | 44 - 121 | | | | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2-Fluorophenol | 91 | | 46 - 133 | | | | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Nitrobenzene-d5 | 92 | | 41 - 120 | | | | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Phenol-d5 | 78 | | 46 - 125 | | | | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| Terphenyl-d14 | 89 | | 35 - 160 | | | | 11/07/17 07:18 | 11/07/17 23:54 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | | | | 11/07/17 07:18 | 11/07/17 23:54 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| PCB-1016 | <0.020 | | 0.020 | 0.0069 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0085 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0064 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0042 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0096 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| Tetrachloro-m-xylene | 85 | | 49 - 129 | | | | 11/07/17 16:20 | 11/10/17 20:36 | 1 |
| DCB Decachlorobiphenyl | 93 | | 37 - 121 | | | | 11/07/17 16:20 | 11/10/17 20:36 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Arsenic | 7.2 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Barium | 100 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Beryllium | 0.62 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Cadmium | 0.15 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Chromium | 16 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Cobalt | 13 | | 0.27 | 0.072 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Copper | 12 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Iron | 18000 | | 11 | 5.7 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Lead | 27 | | 0.27 | 0.13 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Manganese | 880 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Nickel | 18 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Selenium | 0.61 | | 0.55 | 0.32 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Silver | <0.27 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

Date Collected: 10/31/17 13:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.1

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.55 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Vanadium | 23 | | 0.27 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |
| Zinc | 48 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:01 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Barium | 0.87 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Copper | 0.020 | J | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Manganese | 0.031 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Selenium | 0.021 | J | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |
| Zinc | 0.028 | J | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:00 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:26 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:26 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:04 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.039 | | 0.018 | 0.0060 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:12 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.8 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

Date Collected: 10/31/17 13:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.019 | | 0.018 | 0.0079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00095 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 14:15 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 14:15 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Benzo[a]anthracene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

Date Collected: 10/31/17 13:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0084 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 4-Chloroaniline | <0.79 | | 0.79 | 0.18 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.79 | | 0.79 | 0.31 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4-Dinitrophenol | <0.79 | | 0.79 | 0.69 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Hexachlorobenzene | <0.079 | | 0.079 | 0.0090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Hexachlorocyclopentadiene | <0.79 | | 0.79 | 0.22 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Methylnaphthalene | <0.079 | | 0.079 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

Date Collected: 10/31/17 13:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.79 | | 0.79 | 0.37 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| N-Nitrosodi-n-propylamine | <0.079 | | 0.079 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Pentachlorophenol | <0.79 | | 0.79 | 0.62 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Phenanthrene | <0.039 | | 0.039 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Phenol | <0.20 | | 0.20 | 0.087 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 90 | | 44 - 121 | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2-Fluorophenol | 103 | | 46 - 133 | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Nitrobenzene-d5 | 94 | | 41 - 120 | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Phenol-d5 | 93 | | 46 - 125 | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| Terphenyl-d14 | 96 | | 35 - 160 | 11/07/17 07:18 | 11/08/17 00:21 | 1 |
| 2,4,6-Tribromophenol | 58 | | 25 - 139 | 11/07/17 07:18 | 11/08/17 00:21 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0069 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0085 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0064 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0077 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0042 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0096 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 20:51 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 93 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 20:51 | 1 |
| DCB Decachlorobiphenyl | 106 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 20:51 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Arsenic | 7.4 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Barium | 86 | | 0.61 | 0.070 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Beryllium | 0.53 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Cadmium | 0.084 | J | 0.12 | 0.022 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Chromium | 16 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Cobalt | 12 | | 0.31 | 0.080 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Copper | 12 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Iron | 18000 | | 12 | 6.4 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Lead | 18 | | 0.31 | 0.14 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Manganese | 540 | | 0.61 | 0.089 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Nickel | 15 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Selenium | 0.37 | J | 0.61 | 0.36 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Silver | <0.31 | | 0.31 | 0.079 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

Date Collected: 10/31/17 13:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.61 | | 0.61 | 0.31 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Vanadium | 32 | | 0.31 | 0.072 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |
| Zinc | 45 | | 1.2 | 0.54 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:05 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Barium | 0.31 | J | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Manganese | 0.015 | J | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:04 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:30 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:30 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:06 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.061 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:19 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.7 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

Date Collected: 10/31/17 13:15

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.025 | | 0.019 | 0.0082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00098 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00090 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 14:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 86 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 14:40 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 14:40 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Benzo[a]anthracene | 0.0064 | J B | 0.039 | 0.0052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

Date Collected: 10/31/17 13:15

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Benzo[b]fluoranthene | 0.012 | J | 0.039 | 0.0084 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Chrysene | 0.011 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.69 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Fluoranthene | 0.0088 | J | 0.039 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Methylnaphthalene | 0.0091 | J | 0.078 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Naphthalene | 0.0063 | J | 0.039 | 0.0060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

Date Collected: 10/31/17 13:15

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Phenanthrene | 0.021 | J | 0.039 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Phenol | <0.20 | | 0.20 | 0.086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Pyrene | 0.011 | J | 0.039 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 00:47 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 91 | | 44 - 121 | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2-Fluorophenol | 96 | | 46 - 133 | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Nitrobenzene-d5 | 94 | | 41 - 120 | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Phenol-d5 | 90 | | 46 - 125 | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| Terphenyl-d14 | 91 | | 35 - 160 | 11/07/17 07:18 | 11/08/17 00:47 | 1 |
| 2,4,6-Tribromophenol | 56 | | 25 - 139 | 11/07/17 07:18 | 11/08/17 00:47 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0070 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0087 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0065 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0078 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0043 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0098 | mg/Kg | ☼ | 11/07/17 16:20 | 11/10/17 21:07 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 88 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 21:07 | 1 |
| DCB Decachlorobiphenyl | 100 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 21:07 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Antimony | <0.99 | | 0.99 | 0.19 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Arsenic | 6.8 | | 0.49 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Barium | 97 | | 0.49 | 0.056 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Beryllium | 0.54 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Cadmium | 0.13 | | 0.099 | 0.018 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Chromium | 20 | | 0.49 | 0.24 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Cobalt | 12 | | 0.25 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Copper | 11 | | 0.49 | 0.14 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Iron | 17000 | | 9.9 | 5.1 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Lead | 49 | | 0.25 | 0.11 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Manganese | 530 | | 0.49 | 0.072 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Nickel | 15 | | 0.49 | 0.14 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Selenium | 0.69 | | 0.49 | 0.29 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Silver | <0.25 | | 0.25 | 0.064 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

Date Collected: 10/31/17 13:15

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.49 | | 0.49 | 0.25 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Vanadium | 24 | | 0.25 | 0.058 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |
| Zinc | 51 | | 0.99 | 0.43 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:18 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Barium | 1.0 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Copper | 0.022 | J | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Manganese | 0.060 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |
| Zinc | 0.038 | J | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:08 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:34 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:34 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:07 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.038 | | 0.017 | 0.0058 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:21 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.5 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.054 | | 0.016 | 0.0069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Benzene | <0.0016 | | 0.0016 | 0.00040 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Bromodichloromethane | <0.0016 | | 0.0016 | 0.00032 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Bromoform | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Bromomethane | <0.0039 | | 0.0039 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 2-Butanone (MEK) | <0.0039 | | 0.0039 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Carbon disulfide | <0.0039 | | 0.0039 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Carbon tetrachloride | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Chlorobenzene | <0.0016 | | 0.0016 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Chloroethane | <0.0039 | | 0.0039 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Chloroform | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Chloromethane | <0.0039 | | 0.0039 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| cis-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| cis-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Dibromochloromethane | <0.0016 | | 0.0016 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,1-Dichloroethane | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,2-Dichloroethane | <0.0039 | | 0.0039 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,1-Dichloroethene | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,2-Dichloropropane | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,3-Dichloropropene, Total | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Ethylbenzene | <0.0016 | | 0.0016 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 2-Hexanone | <0.0039 | | 0.0039 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Methylene Chloride | <0.0039 | | 0.0039 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0039 | | 0.0039 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Methyl tert-butyl ether | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Styrene | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0016 | | 0.0016 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Tetrachloroethene | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Toluene | <0.0016 | | 0.0016 | 0.00040 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| trans-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| trans-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,1,1-Trichloroethane | <0.0016 | | 0.0016 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,1,2-Trichloroethane | <0.0016 | | 0.0016 | 0.00068 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Trichloroethene | <0.0016 | | 0.0016 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Vinyl acetate | <0.0039 | | 0.0039 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Vinyl chloride | <0.0016 | | 0.0016 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Xylenes, Total | <0.0032 | | 0.0032 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:05 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 101 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 15:05 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 15:05 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.036 | | 0.036 | 0.0066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Acenaphthylene | <0.036 | | 0.036 | 0.0048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Anthracene | <0.036 | | 0.036 | 0.0061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Benzo[a]anthracene | <0.036 | | 0.036 | 0.0049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.036 | | 0.036 | 0.0071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Benzo[b]fluoranthene | <0.036 | | 0.036 | 0.0079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Benzo[g,h,i]perylene | <0.036 | | 0.036 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Benzo[k]fluoranthene | <0.036 | | 0.036 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Bis(2-chloroethoxy)methane | <0.18 | | 0.18 | 0.037 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Bis(2-chloroethyl)ether | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.18 | | 0.18 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 4-Bromophenyl phenyl ether | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Butyl benzyl phthalate | <0.18 | | 0.18 | 0.070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Carbazole | <0.18 | | 0.18 | 0.091 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 4-Chloroaniline | <0.74 | | 0.74 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 4-Chloro-3-methylphenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Chloronaphthalene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Chlorophenol | <0.18 | | 0.18 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 4-Chlorophenyl phenyl ether | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Chrysene | <0.036 | | 0.036 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Dibenz(a,h)anthracene | <0.036 | | 0.036 | 0.0071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Dibenzofuran | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 1,2-Dichlorobenzene | <0.18 | | 0.18 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 1,3-Dichlorobenzene | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 1,4-Dichlorobenzene | <0.18 | | 0.18 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 3,3'-Dichlorobenzidine | <0.18 | | 0.18 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4-Dichlorophenol | <0.36 | | 0.36 | 0.087 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Diethyl phthalate | <0.18 | | 0.18 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4-Dimethylphenol | <0.36 | | 0.36 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Dimethyl phthalate | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Di-n-butyl phthalate | <0.18 | | 0.18 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.74 | | 0.74 | 0.29 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4-Dinitrophenol | <0.74 | | 0.74 | 0.64 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4-Dinitrotoluene | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,6-Dinitrotoluene | <0.18 | | 0.18 | 0.072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Di-n-octyl phthalate | <0.18 | | 0.18 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Fluoranthene | <0.036 | | 0.036 | 0.0068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Fluorene | <0.036 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Hexachlorobenzene | <0.074 | | 0.074 | 0.0085 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Hexachlorobutadiene | <0.18 | | 0.18 | 0.057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Hexachlorocyclopentadiene | <0.74 | | 0.74 | 0.21 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Hexachloroethane | <0.18 | | 0.18 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.036 | | 0.036 | 0.0095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Isophorone | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Methylnaphthalene | <0.074 | | 0.074 | 0.0067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Methylphenol | <0.18 | | 0.18 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 3 & 4 Methylphenol | <0.18 | | 0.18 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Naphthalene | <0.036 | | 0.036 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Nitroaniline | <0.18 | | 0.18 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 3-Nitroaniline | <0.36 | | 0.36 | 0.11 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 4-Nitroaniline | <0.36 | | 0.36 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Nitrobenzene | <0.036 | | 0.036 | 0.0091 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Nitrophenol | <0.36 | | 0.36 | 0.086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.74 | | 0.74 | 0.35 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| N-Nitrosodi-n-propylamine | <0.074 | | 0.074 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| N-Nitrosodiphenylamine | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Pentachlorophenol | <0.74 | | 0.74 | 0.59 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Phenanthrene | <0.036 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Phenol | <0.18 | | 0.18 | 0.081 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Pyrene | <0.036 | | 0.036 | 0.0073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 1,2,4-Trichlorobenzene | <0.18 | | 0.18 | 0.039 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4,5-Trichlorophenol | <0.36 | | 0.36 | 0.083 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4,6-Trichlorophenol | <0.36 | | 0.36 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:14 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 98 | | 44 - 121 | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2-Fluorophenol | 104 | | 46 - 133 | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Nitrobenzene-d5 | 94 | | 41 - 120 | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Phenol-d5 | 93 | | 46 - 125 | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| Terphenyl-d14 | 98 | | 35 - 160 | 11/07/17 07:18 | 11/08/17 01:14 | 1 |
| 2,4,6-Tribromophenol | 56 | | 25 - 139 | 11/07/17 07:18 | 11/08/17 01:14 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.018 | | 0.018 | 0.0064 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| PCB-1221 | <0.018 | | 0.018 | 0.0079 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| PCB-1232 | <0.018 | | 0.018 | 0.0078 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| PCB-1242 | <0.018 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| PCB-1248 | <0.018 | | 0.018 | 0.0071 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| PCB-1254 | <0.018 | | 0.018 | 0.0039 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| PCB-1260 | <0.018 | | 0.018 | 0.0088 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 102 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 11:41 | 1 |
| DCB Decachlorobiphenyl | 79 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 11:41 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.19 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Arsenic | 3.3 | | 0.50 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Barium | 92 | | 2.5 | 0.29 | mg/Kg | ☼ | 11/02/17 07:14 | 11/09/17 11:51 | 5 |
| Beryllium | 2.0 | | 1.0 | 0.23 | mg/Kg | ☼ | 11/02/17 07:14 | 11/09/17 11:51 | 5 |
| Cadmium | 0.12 | | 0.10 | 0.018 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Chromium | 13 | | 0.50 | 0.25 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Cobalt | 22 | | 0.25 | 0.066 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Copper | 14 | | 0.50 | 0.14 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Iron | 50000 | | 50 | 26 | mg/Kg | ☼ | 11/02/17 07:14 | 11/09/17 11:51 | 5 |
| Lead | 15 | | 0.25 | 0.12 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Manganese | 660 | | 2.5 | 0.36 | mg/Kg | ☼ | 11/02/17 07:14 | 11/09/17 11:51 | 5 |
| Nickel | 31 | | 0.50 | 0.15 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Selenium | 0.69 | | 0.50 | 0.29 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Silver | <0.25 | | 0.25 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.4

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.50 | | 0.50 | 0.25 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Vanadium | 19 | | 0.25 | 0.059 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |
| Zinc | 59 | | 1.0 | 0.44 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:22 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Barium | 0.35 | J | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:12 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:39 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:39 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:09 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.030 | | 0.017 | 0.0055 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:23 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.1 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

Date Collected: 10/31/17 13:25

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.022 | | 0.022 | 0.0094 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Benzene | <0.0022 | | 0.0022 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Bromodichloromethane | <0.0022 | | 0.0022 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Bromoform | <0.0022 | | 0.0022 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Bromomethane | <0.0054 | | 0.0054 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 2-Butanone (MEK) | <0.0054 | | 0.0054 | 0.0024 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Carbon disulfide | <0.0054 | | 0.0054 | 0.0011 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Carbon tetrachloride | <0.0022 | | 0.0022 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Chlorobenzene | <0.0022 | | 0.0022 | 0.00079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Chloroethane | <0.0054 | | 0.0054 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Chloroform | <0.0022 | | 0.0022 | 0.00075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Chloromethane | <0.0054 | | 0.0054 | 0.0022 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| cis-1,2-Dichloroethene | <0.0022 | | 0.0022 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| cis-1,3-Dichloropropene | <0.0022 | | 0.0022 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Dibromochloromethane | <0.0022 | | 0.0022 | 0.00070 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,1-Dichloroethane | <0.0022 | | 0.0022 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,2-Dichloroethane | <0.0054 | | 0.0054 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,1-Dichloroethene | <0.0022 | | 0.0022 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,2-Dichloropropane | <0.0022 | | 0.0022 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,3-Dichloropropene, Total | <0.0022 | | 0.0022 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Ethylbenzene | <0.0022 | | 0.0022 | 0.0010 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 2-Hexanone | <0.0054 | | 0.0054 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Methylene Chloride | <0.0054 | | 0.0054 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0054 | | 0.0054 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Methyl tert-butyl ether | <0.0022 | | 0.0022 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Styrene | <0.0022 | | 0.0022 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0022 | | 0.0022 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Tetrachloroethene | <0.0022 | | 0.0022 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Toluene | <0.0022 | | 0.0022 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| trans-1,2-Dichloroethene | <0.0022 | | 0.0022 | 0.00095 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| trans-1,3-Dichloropropene | <0.0022 | | 0.0022 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,1,1-Trichloroethane | <0.0022 | | 0.0022 | 0.00072 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,1,2-Trichloroethane | <0.0022 | | 0.0022 | 0.00092 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Trichloroethene | <0.0022 | | 0.0022 | 0.00073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Vinyl acetate | <0.0054 | | 0.0054 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Vinyl chloride | <0.0022 | | 0.0022 | 0.00095 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Xylenes, Total | <0.0043 | | 0.0043 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:30 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 96 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 15:30 | 1 |
| Toluene-d8 (Surr) | 99 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 15:30 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Anthracene | 0.011 | J | 0.039 | 0.0065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Benzo[a]anthracene | 0.044 | B | 0.039 | 0.0052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

Date Collected: 10/31/17 13:25

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Benzo[b]fluoranthene | 0.056 | | 0.039 | 0.0084 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Benzo[g,h,i]perylene | 0.024 | J | 0.039 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Benzo[k]fluoranthene | 0.027 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Chrysene | 0.058 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Fluoranthene | 0.066 | | 0.039 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.019 | J | 0.039 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Methylnaphthalene | 0.035 | J | 0.078 | 0.0071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Naphthalene | 0.016 | J | 0.039 | 0.0060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

Date Collected: 10/31/17 13:25

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Phenanthrene | 0.069 | | 0.039 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Phenol | <0.20 | | 0.20 | 0.086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Pyrene | 0.072 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 01:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 92 | | 44 - 121 | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2-Fluorophenol | 103 | | 46 - 133 | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Nitrobenzene-d5 | 96 | | 41 - 120 | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Phenol-d5 | 93 | | 46 - 125 | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| Terphenyl-d14 | 96 | | 35 - 160 | 11/07/17 07:18 | 11/08/17 01:41 | 1 |
| 2,4,6-Tribromophenol | 61 | | 25 - 139 | 11/07/17 07:18 | 11/08/17 01:41 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.019 | | 0.019 | 0.0068 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| PCB-1221 | <0.019 | | 0.019 | 0.0085 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| PCB-1232 | <0.019 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| PCB-1242 | <0.019 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| PCB-1248 | <0.019 | | 0.019 | 0.0076 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| PCB-1254 | <0.019 | | 0.019 | 0.0042 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| PCB-1260 | <0.019 | | 0.019 | 0.0095 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 11:56 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 109 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 11:56 | 1 |
| DCB Decachlorobiphenyl | 86 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 11:56 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.20 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Arsenic | 11 | | 0.51 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Barium | 99 | | 0.51 | 0.058 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Beryllium | 0.59 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Cadmium | 0.35 | | 0.10 | 0.018 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Chromium | 15 | | 0.51 | 0.25 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Cobalt | 14 | | 0.25 | 0.066 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Copper | 22 | | 0.51 | 0.14 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Iron | 24000 | | 10 | 5.3 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Lead | 78 | | 0.25 | 0.12 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Manganese | 770 | | 0.51 | 0.074 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Nickel | 26 | | 0.51 | 0.15 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Selenium | 0.69 | | 0.51 | 0.30 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Silver | <0.25 | | 0.25 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

Date Collected: 10/31/17 13:25

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.3

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.51 | | 0.51 | 0.25 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Vanadium | 17 | | 0.25 | 0.060 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |
| Zinc | 97 | | 1.0 | 0.45 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:25 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Barium | 0.74 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Manganese | 0.12 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Selenium | 0.022 J | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |
| Zinc | 0.030 J | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:16 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:43 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:43 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:10 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.058 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:26 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.7 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.017 | | 0.017 | 0.0075 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Bromomethane | <0.0043 | | 0.0043 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 2-Butanone (MEK) | <0.0043 | | 0.0043 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Carbon disulfide | <0.0043 | | 0.0043 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Chloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Chloromethane | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,2-Dichloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00082 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 2-Hexanone | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Methylene Chloride | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Vinyl acetate | <0.0043 | | 0.0043 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 15:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 15:55 | 1 |
| Toluene-d8 (Surr) | 90 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 15:55 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0087 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Methylnaphthalene | <0.081 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.65 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Phenanthrene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:07 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 97 | | 44 - 121 | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2-Fluorophenol | 101 | | 46 - 133 | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Nitrobenzene-d5 | 102 | | 41 - 120 | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Phenol-d5 | 93 | | 46 - 125 | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| Terphenyl-d14 | 98 | | 35 - 160 | 11/07/17 07:18 | 11/08/17 02:07 | 1 |
| 2,4,6-Tribromophenol | 66 | | 25 - 139 | 11/07/17 07:18 | 11/08/17 02:07 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0070 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0087 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0065 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0078 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0043 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0097 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:12 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 98 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 12:12 | 1 |
| DCB Decachlorobiphenyl | 78 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 12:12 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Arsenic | 4.7 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Barium | 190 | | 0.55 | 0.062 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Beryllium | 0.83 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Cadmium | 0.11 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Chromium | 14 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Cobalt | 9.2 | | 0.27 | 0.072 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Copper | 9.8 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Iron | 13000 | | 11 | 5.7 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Lead | 15 | | 0.27 | 0.13 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Manganese | 280 | | 0.55 | 0.079 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Nickel | 13 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Selenium | 0.79 | | 0.55 | 0.32 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Silver | <0.27 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.55 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Vanadium | 25 | | 0.27 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |
| Zinc | 38 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:29 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Barium | 1.3 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Manganese | 0.039 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Nickel | 0.021 J | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:20 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:47 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:47 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:12 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.016 J | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:28 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.3 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

Date Collected: 10/31/17 13:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.063 | | 0.017 | 0.0073 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00042 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00034 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Bromomethane | <0.0042 | | 0.0042 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 2-Butanone (MEK) | <0.0042 | | 0.0042 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Carbon disulfide | <0.0042 | | 0.0042 | 0.00087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Chloroethane | <0.0042 | | 0.0042 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Chloromethane | <0.0042 | | 0.0042 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,2-Dichloroethane | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,3-Dichloropropane, Total | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 2-Hexanone | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Methylene Chloride | <0.0042 | | 0.0042 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0042 | | 0.0042 | 0.0012 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00042 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00071 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Vinyl acetate | <0.0042 | | 0.0042 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Xylenes, Total | <0.0033 | | 0.0033 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 101 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 16:21 | 1 |
| Toluene-d8 (Surr) | 107 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 16:21 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Benzo[a]anthracene | 0.0077 | J B | 0.039 | 0.0052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

Date Collected: 10/31/17 13:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Benzo[b]fluoranthene | 0.0084 | J | 0.039 | 0.0084 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.69 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Fluoranthene | 0.012 | J | 0.039 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Methylnaphthalene | <0.078 | | 0.078 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

Date Collected: 10/31/17 13:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Phenanthrene | <0.039 | | 0.039 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Phenol | <0.20 | | 0.20 | 0.086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Pyrene | 0.020 | J | 0.039 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 90 | | 44 - 121 | | | | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2-Fluorophenol | 102 | | 46 - 133 | | | | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Nitrobenzene-d5 | 89 | | 41 - 120 | | | | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Phenol-d5 | 88 | | 46 - 125 | | | | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| Terphenyl-d14 | 98 | | 35 - 160 | | | | 11/07/17 07:18 | 11/08/17 02:34 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | | | | 11/07/17 07:18 | 11/08/17 02:34 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| PCB-1016 | <0.020 | | 0.020 | 0.0070 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0087 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0065 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0078 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0043 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0097 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| Tetrachloro-m-xylene | 95 | | 49 - 129 | | | | 11/08/17 07:22 | 11/09/17 12:27 | 1 |
| DCB Decachlorobiphenyl | 79 | | 37 - 121 | | | | 11/08/17 07:22 | 11/09/17 12:27 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Arsenic | 1.9 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Barium | 60 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Beryllium | 0.64 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Cadmium | 0.12 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Chromium | 15 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Cobalt | 5.9 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Copper | 7.3 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Iron | 13000 | | 11 | 5.7 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Lead | 8.8 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Manganese | 270 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Nickel | 12 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Selenium | <0.55 | | 0.55 | 0.32 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Silver | <0.28 | | 0.28 | 0.071 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

Date Collected: 10/31/17 13:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.5

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.55 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Vanadium | 21 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |
| Zinc | 34 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:33 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Barium | 0.64 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Manganese | 0.033 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Nickel | 0.011 J | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:24 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:51 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:51 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:13 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.021 | | 0.018 | 0.0060 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:30 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.5 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

Date Collected: 10/31/17 14:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.074 | | 0.018 | 0.0079 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00095 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00087 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 16:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 16:45 | 1 |
| Toluene-d8 (Surr) | 84 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 16:45 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

Date Collected: 10/31/17 14:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0086 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Methylnaphthalene | <0.080 | | 0.080 | 0.0073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.094 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

Date Collected: 10/31/17 14:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Phenanthrene | 0.0067 | J | 0.040 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 94 | | 44 - 121 | | | | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2-Fluorophenol | 101 | | 46 - 133 | | | | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Nitrobenzene-d5 | 100 | | 41 - 120 | | | | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Phenol-d5 | 90 | | 46 - 125 | | | | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| Terphenyl-d14 | 93 | | 35 - 160 | | | | 11/07/17 07:18 | 11/08/17 03:00 | 1 |
| 2,4,6-Tribromophenol | 57 | | 25 - 139 | | | | 11/07/17 07:18 | 11/08/17 03:00 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Arsenic | 4.9 | | 0.57 | 0.20 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Barium | 64 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Beryllium | 0.44 | | 0.23 | 0.054 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Cadmium | 0.079 | J | 0.11 | 0.021 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Chromium | 15 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Cobalt | 4.8 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Copper | 10 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Iron | 15000 | | 11 | 6.0 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Lead | 11 | | 0.29 | 0.13 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Manganese | 89 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Nickel | 11 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Selenium | 0.47 | J | 0.57 | 0.34 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Thallium | <0.57 | | 0.57 | 0.29 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Vanadium | 27 | | 0.29 | 0.068 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |
| Zinc | 35 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:37 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Barium | 0.31 | J | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Iron | 0.55 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

Date Collected: 10/31/17 14:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Manganese | 0.55 | | 0.025 | 0.010 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | - | 11/03/17 15:00 | 11/05/17 15:28 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.39 | | 0.025 | 0.010 | mg/L | - | 11/03/17 14:56 | 11/06/17 01:17 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/03/17 15:00 | 11/06/17 18:55 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/03/17 15:00 | 11/06/17 18:55 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/03/17 12:20 | 11/06/17 09:15 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.018 | J | 0.020 | 0.0065 | mg/Kg | ☼ | 11/02/17 16:10 | 11/03/17 09:40 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.2 | | 0.20 | 0.20 | SU | - | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

Date Collected: 10/31/17 14:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00097 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,3-Dichloropropene, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:11 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Dibromofluoromethane | 106 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 107 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 17:11 | 1 |
| Toluene-d8 (Surr) | 77 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 17:11 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Benzo[a]anthracene | 0.011 | J B | 0.040 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

Date Collected: 10/31/17 14:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Benzo[b]fluoranthene | 0.012 | J | 0.040 | 0.0088 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.71 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Fluoranthene | 0.017 | J | 0.040 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0094 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.23 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Methylnaphthalene | 0.014 | J | 0.082 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

Date Collected: 10/31/17 14:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.65 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Phenanthrene | 0.030 | J | 0.040 | 0.0057 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Pyrene | 0.018 | J | 0.040 | 0.0081 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.093 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 87 | | 44 - 121 | | | | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2-Fluorophenol | 95 | | 46 - 133 | | | | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Nitrobenzene-d5 | 93 | | 41 - 120 | | | | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Phenol-d5 | 85 | | 46 - 125 | | | | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| Terphenyl-d14 | 86 | | 35 - 160 | | | | 11/07/17 07:18 | 11/08/17 03:27 | 1 |
| 2,4,6-Tribromophenol | 57 | | 25 - 139 | | | | 11/07/17 07:18 | 11/08/17 03:27 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Arsenic | 9.4 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Barium | 70 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Beryllium | 0.48 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Cadmium | 0.16 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Chromium | 20 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Cobalt | 6.6 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Copper | 20 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Iron | 22000 | | 11 | 5.9 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Lead | 57 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Manganese | 200 | | 0.56 | 0.082 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Nickel | 15 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Selenium | <0.56 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Silver | <0.28 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Thallium | <0.56 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Vanadium | 33 | | 0.28 | 0.067 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |
| Zinc | 66 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:41 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Barium | 0.28 | J | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

Date Collected: 10/31/17 14:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Manganese | 0.097 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:32 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:59 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:59 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:16 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.040 | | 0.020 | 0.0065 | mg/Kg | ✱ | 11/02/17 16:10 | 11/03/17 09:42 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.8 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

Date Collected: 10/31/17 14:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 77.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0078 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00094 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00066 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00050 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,3-Dichloropropene, Total | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00086 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00077 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/01/17 18:01 | 11/03/17 17:36 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 77 | | 75 - 131 | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Dibromofluoromethane | 108 | | 75 - 126 | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 105 | | 70 - 134 | 11/01/17 18:01 | 11/03/17 17:36 | 1 |
| Toluene-d8 (Surr) | 102 | | 75 - 124 | 11/01/17 18:01 | 11/03/17 17:36 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0075 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Anthracene | 0.011 | J | 0.041 | 0.0069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Benzo[a]anthracene | 0.028 | J B | 0.041 | 0.0056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

Date Collected: 10/31/17 14:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 77.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.020 | J | 0.041 | 0.0080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Benzo[b]fluoranthene | 0.024 | J | 0.041 | 0.0090 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.079 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 4-Chloroaniline | <0.84 | | 0.84 | 0.20 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Chrysene | 0.034 | J | 0.041 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.099 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.84 | | 0.84 | 0.33 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4-Dinitrophenol | <0.84 | | 0.84 | 0.73 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.082 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Fluoranthene | 0.034 | J | 0.041 | 0.0077 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Hexachlorobenzene | <0.084 | | 0.084 | 0.0096 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Hexachlorocyclopentadiene | <0.84 | | 0.84 | 0.24 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Methylnaphthalene | 0.058 | J | 0.084 | 0.0076 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Naphthalene | 0.030 | J | 0.041 | 0.0064 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

Date Collected: 10/31/17 14:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 77.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.84 | | 0.84 | 0.40 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| N-Nitrosodi-n-propylamine | <0.084 | | 0.084 | 0.051 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Pentachlorophenol | <0.84 | | 0.84 | 0.67 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Phenanthrene | 0.12 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Phenol | <0.21 | | 0.21 | 0.092 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Pyrene | 0.044 | | 0.041 | 0.0083 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.095 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 89 | | 44 - 121 | | | | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2-Fluorophenol | 90 | | 46 - 133 | | | | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Nitrobenzene-d5 | 86 | | 41 - 120 | | | | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | | | | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| Terphenyl-d14 | 94 | | 35 - 160 | | | | 11/07/17 07:18 | 11/08/17 03:54 | 1 |
| 2,4,6-Tribromophenol | 64 | | 25 - 139 | | | | 11/07/17 07:18 | 11/08/17 03:54 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | F1 | 1.2 | 0.24 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Arsenic | 7.3 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Barium | 66 | | 0.61 | 0.070 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Beryllium | 0.42 | | 0.25 | 0.057 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Cadmium | 0.11 | J | 0.12 | 0.022 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Chromium | 22 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Cobalt | 6.2 | | 0.31 | 0.081 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Copper | 17 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Iron | 21000 | | 12 | 6.4 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Lead | 19 | F2 F1 | 0.31 | 0.14 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Manganese | 190 | | 0.61 | 0.089 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Nickel | 14 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Selenium | 0.49 | J F1 | 0.61 | 0.36 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Silver | <0.31 | | 0.31 | 0.079 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Thallium | <0.61 | | 0.61 | 0.31 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Vanadium | 37 | | 0.31 | 0.073 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |
| Zinc | 53 | | 1.2 | 0.54 | mg/Kg | ☼ | 11/02/17 07:14 | 11/02/17 18:45 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Barium | 0.22 | J | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

Date Collected: 10/31/17 14:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 77.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Manganese | 0.089 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 15:36 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 19:03 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 19:03 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 09:21 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.025 | | 0.019 | 0.0062 | mg/Kg | ✱ | 11/02/17 16:10 | 11/03/17 09:45 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.0 | | 0.20 | 0.20 | SU | | | 11/03/17 08:57 | 1 |

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Qualifiers

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| B | Compound was found in the blank and sample. |

Metals

| Qualifier | Qualifier Description |
|-----------|--|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| B | Compound was found in the blank and sample. |
| F3 | Duplicate RPD exceeds the control limit |
| F5 | Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| F4 | MS/MSD RPD exceeds control limits due to sample size difference. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

GC/MS VOA

Analysis Batch: 408095

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| MB 500-408095/6 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408095/4 | Lab Control Sample | Total/NA | Solid | 8260B | |

Prep Batch: 408142

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 5035 | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 5035 | |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 5035 | |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 5035 | |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 5035 | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 5035 | |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 5035 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

GC/MS VOA (Continued)

Prep Batch: 408142 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 5035 | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 5035 | |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 5035 | |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 5035 | |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 5035 | |

Analysis Batch: 408295

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 8260B | 408142 |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 8260B | 408142 |
| MB 500-408295/6 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408295/29 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 500-408295/30 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

GC/MS Semi VOA

Prep Batch: 408732

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 3541 | |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 3541 | |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 3541 | |
| MB 500-408732/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408732/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| 500-136575-16 MS | 3160-32-2 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-16 MSD | 3160-32-2 (0-3.5') | Total/NA | Solid | 3541 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

GC/MS Semi VOA (Continued)

Prep Batch: 408852

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 3541 | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 3541 | |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 3541 | |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-14 - DL | 3160-28-3 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 3541 | |
| MB 500-408852/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408852/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Analysis Batch: 408867

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 8270D | 408732 |
| MB 500-408732/1-A | Method Blank | Total/NA | Solid | 8270D | 408732 |
| LCS 500-408732/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 408732 |
| 500-136575-16 MS | 3160-32-2 (0-3.5') | Total/NA | Solid | 8270D | 408732 |
| 500-136575-16 MSD | 3160-32-2 (0-3.5') | Total/NA | Solid | 8270D | 408732 |

Analysis Batch: 408968

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 8270D | 408852 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

GC/MS Semi VOA (Continued)

Analysis Batch: 408968 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 8270D | 408852 |
| MB 500-408852/1-A | Method Blank | Total/NA | Solid | 8270D | 408852 |
| LCS 500-408852/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 408852 |

Analysis Batch: 408988

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 8270D | 408852 |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 8270D | 408852 |

Analysis Batch: 409184

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------|-----------|--------|--------|------------|
| 500-136575-14 - DL | 3160-28-3 (0-5') | Total/NA | Solid | 8270D | 408852 |

GC Semi VOA

Prep Batch: 408853

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 3541 | |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 3541 | |
| MB 500-408853/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408853/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| 500-136575-24 MS | 3160-45-2 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-24 MSD | 3160-45-2 (5-6') | Total/NA | Solid | 3541 | |

Prep Batch: 408939

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 3541 | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 3541 | |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 3541 | |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 3541 | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 3541 | |
| MB 500-408939/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408939/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| LCS 500-408939/3-A | Lab Control Sample | Total/NA | Solid | 3541 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

GC Semi VOA (Continued)

Analysis Batch: 409021

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 8151A | 409129 |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 8151A | 409129 |
| MB 500-409129/1-A | Method Blank | Total/NA | Solid | 8151A | 409129 |
| LCS 500-409129/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 409129 |

Analysis Batch: 409066

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 8081B | 408939 |
| MB 500-408939/1-A | Method Blank | Total/NA | Solid | 8081B | 408939 |
| LCS 500-408939/2-A | Lab Control Sample | Total/NA | Solid | 8081B | 408939 |

Prep Batch: 409129

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 8151A | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 8151A | |
| MB 500-409129/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 500-409129/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |

Analysis Batch: 409181

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 8082A | 408939 |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 8082A | 408939 |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 8082A | 408939 |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 8082A | 408939 |
| MB 500-408939/1-A | Method Blank | Total/NA | Solid | 8082A | 408939 |
| LCS 500-408939/3-A | Lab Control Sample | Total/NA | Solid | 8082A | 408939 |

Analysis Batch: 409183

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 8081B | 408939 |

Analysis Batch: 409369

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 8082A | 408853 |
| MB 500-408853/1-A | Method Blank | Total/NA | Solid | 8082A | 408853 |
| LCS 500-408853/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 408853 |
| 500-136575-24 MS | 3160-45-2 (5-6') | Total/NA | Solid | 8082A | 408853 |
| 500-136575-24 MSD | 3160-45-2 (5-6') | Total/NA | Solid | 8082A | 408853 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals

Prep Batch: 408066

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 3050B | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 3050B | |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 3050B | |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 3050B | |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 3050B | |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 3050B | |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 3050B | |
| MB 500-408066/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408066/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-136575-31 MS | 3160-50-3 (0-2') | Total/NA | Solid | 3050B | |
| 500-136575-31 MSD | 3160-50-3 (0-2') | Total/NA | Solid | 3050B | |
| 500-136575-31 DU | 3160-50-3 (0-2') | Total/NA | Solid | 3050B | |

Prep Batch: 408083

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 3050B | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 3050B | |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 3050B | |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 3050B | |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 3050B | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 3050B | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 3050B | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 3050B | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 3050B | |
| MB 500-408083/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408083/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-136575-1 MS | 3160-16-4 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-1 MSD | 3160-16-4 (0-4') | Total/NA | Solid | 3050B | |
| 500-136575-1 DU | 3160-16-4 (0-4') | Total/NA | Solid | 3050B | |

Leach Batch: 408171

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136575-8 | 3160-25-1 (0-4') | SPLP East | Solid | 1312 | |
| 500-136575-11 | 3160-26-1 (0-4') | SPLP East | Solid | 1312 | |
| 500-136575-12 | 3160-28-1 (0-5') | SPLP East | Solid | 1312 | |
| 500-136575-13 | 3160-28-2 (0-5') | SPLP East | Solid | 1312 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Leach Batch: 408171 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 500-136575-14 | 3160-28-3 (0-5') | SPLP East | Solid | 1312 | |
| LB 500-408171/1-B | Method Blank | SPLP East | Solid | 1312 | |

Leach Batch: 408172

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-20 | 3160-32-6 (0-3.5') | SPLP East | Solid | 1312 | |
| 500-136575-29 | 3160-50-1 (0-2') | SPLP East | Solid | 1312 | |
| LB 500-408172/1-B | Method Blank | SPLP East | Solid | 1312 | |

Leach Batch: 408173

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-2 | 3160-16-3 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-3 | 3160-16-2 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-4 | 3160-16-1 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-5 | 3160-16-5 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-6 | 3160-23-1 (0-4.5') | TCLP | Solid | 1311 | |
| 500-136575-7 | 3160-23-2 (0-4.5') | TCLP | Solid | 1311 | |
| 500-136575-8 | 3160-25-1 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-9 | 3160-25-2 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-10 | 3160-26-2 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-11 | 3160-26-1 (0-4') | TCLP | Solid | 1311 | |
| 500-136575-12 | 3160-28-1 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-13 | 3160-28-2 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-14 | 3160-28-3 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-15 | 3160-32-1 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-16 | 3160-32-2 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-17 | 3160-32-3 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-18 | 3160-32-4 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-19 | 3160-32-5 (0-3.5') | TCLP | Solid | 1311 | |
| LB 500-408173/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 500-408173/1-C | Method Blank | TCLP | Solid | 1311 | |
| 500-136575-19 MS | 3160-32-5 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-19 DU | 3160-32-5 (0-3.5') | TCLP | Solid | 1311 | |

Leach Batch: 408176

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-20 | 3160-32-6 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-21 | 3160-45-1 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-22 | 3160-45-1 (5-6') | TCLP | Solid | 1311 | |
| 500-136575-23 | 3160-45-2 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-24 | 3160-45-2 (5-6') | TCLP | Solid | 1311 | |
| 500-136575-25 | 3160-45-3 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-26 | 3160-45-3 (5-6') | TCLP | Solid | 1311 | |
| 500-136575-27 | 3160-45-4 (0-5') | TCLP | Solid | 1311 | |
| 500-136575-28 | 3160-45-4 (5-6') | TCLP | Solid | 1311 | |
| 500-136575-29 | 3160-50-1 (0-2') | TCLP | Solid | 1311 | |
| 500-136575-30 | 3160-50-2 (0-2') | TCLP | Solid | 1311 | |
| 500-136575-31 | 3160-50-3 (0-2') | TCLP | Solid | 1311 | |
| LB 500-408176/1-C | Method Blank | TCLP | Solid | 1311 | |
| LB 500-408176/1-D | Method Blank | TCLP | Solid | 1311 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Leach Batch: 408176 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-20 MS | 3160-32-6 (0-3.5') | TCLP | Solid | 1311 | |
| 500-136575-20 DU | 3160-32-6 (0-3.5') | TCLP | Solid | 1311 | |

Prep Batch: 408223

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 7471B | |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 7471B | |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 7471B | |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 7471B | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 7471B | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 7471B | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 7471B | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 7471B | |
| MB 500-408223/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-408223/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-136575-6 MS | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | |
| 500-136575-6 MSD | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | |
| 500-136575-6 DU | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | |

Prep Batch: 408246

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 7471B | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 7471B | |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 7471B | |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 7471B | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 7471B | |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 7471B | |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 7471B | |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | |
| MB 500-408246/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-408246/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-136575-31 MS | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | |
| 500-136575-31 MSD | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | |
| 500-136575-31 DU | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Analysis Batch: 408311

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 6010B | 408066 |
| MB 500-408066/1-A | Method Blank | Total/NA | Solid | 6010B | 408066 |
| MB 500-408083/1-A | Method Blank | Total/NA | Solid | 6010B | 408083 |
| LCS 500-408066/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408066 |
| LCS 500-408083/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408083 |
| 500-136575-1 MS | 3160-16-4 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-1 MSD | 3160-16-4 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-31 MS | 3160-50-3 (0-2') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-31 MSD | 3160-50-3 (0-2') | Total/NA | Solid | 6010B | 408066 |
| 500-136575-1 DU | 3160-16-4 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-31 DU | 3160-50-3 (0-2') | Total/NA | Solid | 6010B | 408066 |

Prep Batch: 408350

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-2 | 3160-16-3 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-3 | 3160-16-2 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-4 | 3160-16-1 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-5 | 3160-16-5 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-6 | 3160-23-1 (0-4.5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-7 | 3160-23-2 (0-4.5') | TCLP | Solid | 7470A | 408173 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Prep Batch: 408350 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-8 | 3160-25-1 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-9 | 3160-25-2 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-10 | 3160-26-2 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-11 | 3160-26-1 (0-4') | TCLP | Solid | 7470A | 408173 |
| 500-136575-12 | 3160-28-1 (0-5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-13 | 3160-28-2 (0-5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-14 | 3160-28-3 (0-5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-15 | 3160-32-1 (0-3.5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-16 | 3160-32-2 (0-3.5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-17 | 3160-32-3 (0-3.5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-18 | 3160-32-4 (0-3.5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-19 | 3160-32-5 (0-3.5') | TCLP | Solid | 7470A | 408173 |
| LB 500-408173/1-B | Method Blank | TCLP | Solid | 7470A | 408173 |
| MB 500-408350/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-408350/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-136575-19 MS | 3160-32-5 (0-3.5') | TCLP | Solid | 7470A | 408173 |
| 500-136575-19 DU | 3160-32-5 (0-3.5') | TCLP | Solid | 7470A | 408173 |

Prep Batch: 408360

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-20 | 3160-32-6 (0-3.5') | TCLP | Solid | 7470A | 408176 |
| 500-136575-21 | 3160-45-1 (0-5') | TCLP | Solid | 7470A | 408176 |
| 500-136575-22 | 3160-45-1 (5-6') | TCLP | Solid | 7470A | 408176 |
| 500-136575-23 | 3160-45-2 (0-5') | TCLP | Solid | 7470A | 408176 |
| 500-136575-24 | 3160-45-2 (5-6') | TCLP | Solid | 7470A | 408176 |
| 500-136575-25 | 3160-45-3 (0-5') | TCLP | Solid | 7470A | 408176 |
| 500-136575-26 | 3160-45-3 (5-6') | TCLP | Solid | 7470A | 408176 |
| 500-136575-27 | 3160-45-4 (0-5') | TCLP | Solid | 7470A | 408176 |
| 500-136575-28 | 3160-45-4 (5-6') | TCLP | Solid | 7470A | 408176 |
| 500-136575-29 | 3160-50-1 (0-2') | TCLP | Solid | 7470A | 408176 |
| 500-136575-30 | 3160-50-2 (0-2') | TCLP | Solid | 7470A | 408176 |
| 500-136575-31 | 3160-50-3 (0-2') | TCLP | Solid | 7470A | 408176 |
| LB 500-408176/1-C | Method Blank | TCLP | Solid | 7470A | 408176 |
| MB 500-408360/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-408360/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-136575-20 MS | 3160-32-6 (0-3.5') | TCLP | Solid | 7470A | 408176 |
| 500-136575-20 DU | 3160-32-6 (0-3.5') | TCLP | Solid | 7470A | 408176 |

Analysis Batch: 408366

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 7471B | 408223 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Analysis Batch: 408366 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | 408246 |
| MB 500-408223/12-A | Method Blank | Total/NA | Solid | 7471B | 408223 |
| MB 500-408246/12-A | Method Blank | Total/NA | Solid | 7471B | 408246 |
| LCS 500-408223/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 408223 |
| LCS 500-408246/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 408246 |
| 500-136575-6 MS | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-6 MSD | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-31 MS | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-31 MSD | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | 408246 |
| 500-136575-6 DU | 3160-23-1 (0-4.5') | Total/NA | Solid | 7471B | 408223 |
| 500-136575-31 DU | 3160-50-3 (0-2') | Total/NA | Solid | 7471B | 408246 |

Prep Batch: 408404

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-8 | 3160-25-1 (0-4') | SPLP East | Solid | 3010A | 408171 |
| 500-136575-11 | 3160-26-1 (0-4') | SPLP East | Solid | 3010A | 408171 |
| 500-136575-12 | 3160-28-1 (0-5') | SPLP East | Solid | 3010A | 408171 |
| 500-136575-13 | 3160-28-2 (0-5') | SPLP East | Solid | 3010A | 408171 |
| 500-136575-14 | 3160-28-3 (0-5') | SPLP East | Solid | 3010A | 408171 |
| LB 500-408171/1-B | Method Blank | SPLP East | Solid | 3010A | 408171 |
| LCS 500-408404/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Prep Batch: 408407

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-20 | 3160-32-6 (0-3.5') | SPLP East | Solid | 3010A | 408172 |
| 500-136575-29 | 3160-50-1 (0-2') | SPLP East | Solid | 3010A | 408172 |
| LB 500-408172/1-B | Method Blank | SPLP East | Solid | 3010A | 408172 |
| LCS 500-408407/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Prep Batch: 408408

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | TCLP | Solid | 3010A | 408173 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Prep Batch: 408408 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-2 | 3160-16-3 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-3 | 3160-16-2 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-4 | 3160-16-1 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-5 | 3160-16-5 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-6 | 3160-23-1 (0-4.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-7 | 3160-23-2 (0-4.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-8 | 3160-25-1 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-9 | 3160-25-2 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-10 | 3160-26-2 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-11 | 3160-26-1 (0-4') | TCLP | Solid | 3010A | 408173 |
| 500-136575-12 | 3160-28-1 (0-5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-13 | 3160-28-2 (0-5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-14 | 3160-28-3 (0-5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-15 | 3160-32-1 (0-3.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-16 | 3160-32-2 (0-3.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-17 | 3160-32-3 (0-3.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-18 | 3160-32-4 (0-3.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-19 | 3160-32-5 (0-3.5') | TCLP | Solid | 3010A | 408173 |
| LB 500-408173/1-C | Method Blank | TCLP | Solid | 3010A | 408173 |
| LCS 500-408408/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| 500-136575-19 MS | 3160-32-5 (0-3.5') | TCLP | Solid | 3010A | 408173 |
| 500-136575-19 DU | 3160-32-5 (0-3.5') | TCLP | Solid | 3010A | 408173 |

Prep Batch: 408410

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-20 | 3160-32-6 (0-3.5') | TCLP | Solid | 3010A | 408176 |
| 500-136575-21 | 3160-45-1 (0-5') | TCLP | Solid | 3010A | 408176 |
| 500-136575-22 | 3160-45-1 (5-6') | TCLP | Solid | 3010A | 408176 |
| 500-136575-23 | 3160-45-2 (0-5') | TCLP | Solid | 3010A | 408176 |
| 500-136575-24 | 3160-45-2 (5-6') | TCLP | Solid | 3010A | 408176 |
| 500-136575-25 | 3160-45-3 (0-5') | TCLP | Solid | 3010A | 408176 |
| 500-136575-26 | 3160-45-3 (5-6') | TCLP | Solid | 3010A | 408176 |
| 500-136575-27 | 3160-45-4 (0-5') | TCLP | Solid | 3010A | 408176 |
| 500-136575-28 | 3160-45-4 (5-6') | TCLP | Solid | 3010A | 408176 |
| 500-136575-29 | 3160-50-1 (0-2') | TCLP | Solid | 3010A | 408176 |
| 500-136575-30 | 3160-50-2 (0-2') | TCLP | Solid | 3010A | 408176 |
| 500-136575-31 | 3160-50-3 (0-2') | TCLP | Solid | 3010A | 408176 |
| LB 500-408176/1-D | Method Blank | TCLP | Solid | 3010A | 408176 |
| LCS 500-408410/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Analysis Batch: 408472

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 6010B | 408083 |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 6010B | 408083 |

Analysis Batch: 408541

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-2 | 3160-16-3 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-3 | 3160-16-2 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-4 | 3160-16-1 (0-4') | TCLP | Solid | 6010B | 408408 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Analysis Batch: 408541 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-5 | 3160-16-5 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-6 | 3160-23-1 (0-4.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-7 | 3160-23-2 (0-4.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-8 | 3160-25-1 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-9 | 3160-25-2 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-10 | 3160-26-2 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-11 | 3160-26-1 (0-4') | TCLP | Solid | 6010B | 408408 |
| 500-136575-12 | 3160-28-1 (0-5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-13 | 3160-28-2 (0-5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-14 | 3160-28-3 (0-5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-15 | 3160-32-1 (0-3.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-16 | 3160-32-2 (0-3.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-17 | 3160-32-3 (0-3.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-18 | 3160-32-4 (0-3.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-19 | 3160-32-5 (0-3.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-20 | 3160-32-6 (0-3.5') | TCLP | Solid | 6010B | 408410 |
| 500-136575-21 | 3160-45-1 (0-5') | TCLP | Solid | 6010B | 408410 |
| 500-136575-22 | 3160-45-1 (5-6') | TCLP | Solid | 6010B | 408410 |
| 500-136575-23 | 3160-45-2 (0-5') | TCLP | Solid | 6010B | 408410 |
| 500-136575-24 | 3160-45-2 (5-6') | TCLP | Solid | 6010B | 408410 |
| 500-136575-25 | 3160-45-3 (0-5') | TCLP | Solid | 6010B | 408410 |
| 500-136575-26 | 3160-45-3 (5-6') | TCLP | Solid | 6010B | 408410 |
| 500-136575-27 | 3160-45-4 (0-5') | TCLP | Solid | 6010B | 408410 |
| 500-136575-28 | 3160-45-4 (5-6') | TCLP | Solid | 6010B | 408410 |
| 500-136575-29 | 3160-50-1 (0-2') | TCLP | Solid | 6010B | 408410 |
| 500-136575-30 | 3160-50-2 (0-2') | TCLP | Solid | 6010B | 408410 |
| 500-136575-31 | 3160-50-3 (0-2') | TCLP | Solid | 6010B | 408410 |
| LB 500-408173/1-C | Method Blank | TCLP | Solid | 6010B | 408408 |
| LB 500-408176/1-D | Method Blank | TCLP | Solid | 6010B | 408410 |
| LCS 500-408408/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408408 |
| LCS 500-408410/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408410 |
| 500-136575-19 MS | 3160-32-5 (0-3.5') | TCLP | Solid | 6010B | 408408 |
| 500-136575-19 DU | 3160-32-5 (0-3.5') | TCLP | Solid | 6010B | 408408 |

Analysis Batch: 408545

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-8 | 3160-25-1 (0-4') | SPLP East | Solid | 6010B | 408404 |
| 500-136575-11 | 3160-26-1 (0-4') | SPLP East | Solid | 6010B | 408404 |
| 500-136575-12 | 3160-28-1 (0-5') | SPLP East | Solid | 6010B | 408404 |
| 500-136575-13 | 3160-28-2 (0-5') | SPLP East | Solid | 6010B | 408404 |
| 500-136575-14 | 3160-28-3 (0-5') | SPLP East | Solid | 6010B | 408404 |
| 500-136575-20 | 3160-32-6 (0-3.5') | SPLP East | Solid | 6010B | 408407 |
| 500-136575-29 | 3160-50-1 (0-2') | SPLP East | Solid | 6010B | 408407 |
| LB 500-408171/1-B | Method Blank | SPLP East | Solid | 6010B | 408404 |
| LB 500-408172/1-B | Method Blank | SPLP East | Solid | 6010B | 408407 |
| LCS 500-408404/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408404 |
| LCS 500-408407/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408407 |

Analysis Batch: 408624

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | TCLP | Solid | 7470A | 408350 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Analysis Batch: 408624 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-2 | 3160-16-3 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-3 | 3160-16-2 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-4 | 3160-16-1 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-5 | 3160-16-5 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-6 | 3160-23-1 (0-4.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-7 | 3160-23-2 (0-4.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-8 | 3160-25-1 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-9 | 3160-25-2 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-10 | 3160-26-2 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-11 | 3160-26-1 (0-4') | TCLP | Solid | 7470A | 408350 |
| 500-136575-12 | 3160-28-1 (0-5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-13 | 3160-28-2 (0-5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-14 | 3160-28-3 (0-5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-15 | 3160-32-1 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-16 | 3160-32-2 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-17 | 3160-32-3 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-18 | 3160-32-4 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-19 | 3160-32-5 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-20 | 3160-32-6 (0-3.5') | TCLP | Solid | 7470A | 408360 |
| 500-136575-21 | 3160-45-1 (0-5') | TCLP | Solid | 7470A | 408360 |
| 500-136575-22 | 3160-45-1 (5-6') | TCLP | Solid | 7470A | 408360 |
| 500-136575-23 | 3160-45-2 (0-5') | TCLP | Solid | 7470A | 408360 |
| 500-136575-24 | 3160-45-2 (5-6') | TCLP | Solid | 7470A | 408360 |
| 500-136575-25 | 3160-45-3 (0-5') | TCLP | Solid | 7470A | 408360 |
| 500-136575-26 | 3160-45-3 (5-6') | TCLP | Solid | 7470A | 408360 |
| 500-136575-27 | 3160-45-4 (0-5') | TCLP | Solid | 7470A | 408360 |
| 500-136575-28 | 3160-45-4 (5-6') | TCLP | Solid | 7470A | 408360 |
| 500-136575-29 | 3160-50-1 (0-2') | TCLP | Solid | 7470A | 408360 |
| 500-136575-30 | 3160-50-2 (0-2') | TCLP | Solid | 7470A | 408360 |
| 500-136575-31 | 3160-50-3 (0-2') | TCLP | Solid | 7470A | 408360 |
| LB 500-408173/1-B | Method Blank | TCLP | Solid | 7470A | 408350 |
| LB 500-408176/1-C | Method Blank | TCLP | Solid | 7470A | 408360 |
| MB 500-408350/12-A | Method Blank | Total/NA | Solid | 7470A | 408350 |
| MB 500-408360/12-A | Method Blank | Total/NA | Solid | 7470A | 408360 |
| LCS 500-408350/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 408350 |
| LCS 500-408360/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 408360 |
| 500-136575-19 MS | 3160-32-5 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-20 MS | 3160-32-6 (0-3.5') | TCLP | Solid | 7470A | 408360 |
| 500-136575-19 DU | 3160-32-5 (0-3.5') | TCLP | Solid | 7470A | 408350 |
| 500-136575-20 DU | 3160-32-6 (0-3.5') | TCLP | Solid | 7470A | 408360 |

Analysis Batch: 408763

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-2 | 3160-16-3 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-3 | 3160-16-2 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-4 | 3160-16-1 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-5 | 3160-16-5 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-6 | 3160-23-1 (0-4.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-7 | 3160-23-2 (0-4.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-8 | 3160-25-1 (0-4') | TCLP | Solid | 6020A | 408408 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Metals (Continued)

Analysis Batch: 408763 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-9 | 3160-25-2 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-10 | 3160-26-2 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-11 | 3160-26-1 (0-4') | TCLP | Solid | 6020A | 408408 |
| 500-136575-12 | 3160-28-1 (0-5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-13 | 3160-28-2 (0-5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-14 | 3160-28-3 (0-5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-15 | 3160-32-1 (0-3.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-16 | 3160-32-2 (0-3.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-17 | 3160-32-3 (0-3.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-18 | 3160-32-4 (0-3.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-19 | 3160-32-5 (0-3.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-20 | 3160-32-6 (0-3.5') | TCLP | Solid | 6020A | 408410 |
| 500-136575-21 | 3160-45-1 (0-5') | TCLP | Solid | 6020A | 408410 |
| 500-136575-22 | 3160-45-1 (5-6') | TCLP | Solid | 6020A | 408410 |
| 500-136575-23 | 3160-45-2 (0-5') | TCLP | Solid | 6020A | 408410 |
| 500-136575-24 | 3160-45-2 (5-6') | TCLP | Solid | 6020A | 408410 |
| 500-136575-25 | 3160-45-3 (0-5') | TCLP | Solid | 6020A | 408410 |
| 500-136575-26 | 3160-45-3 (5-6') | TCLP | Solid | 6020A | 408410 |
| 500-136575-27 | 3160-45-4 (0-5') | TCLP | Solid | 6020A | 408410 |
| 500-136575-28 | 3160-45-4 (5-6') | TCLP | Solid | 6020A | 408410 |
| 500-136575-29 | 3160-50-1 (0-2') | TCLP | Solid | 6020A | 408410 |
| 500-136575-30 | 3160-50-2 (0-2') | TCLP | Solid | 6020A | 408410 |
| 500-136575-31 | 3160-50-3 (0-2') | TCLP | Solid | 6020A | 408410 |
| LB 500-408173/1-C | Method Blank | TCLP | Solid | 6020A | 408408 |
| LB 500-408176/1-D | Method Blank | TCLP | Solid | 6020A | 408410 |
| LCS 500-408408/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 408408 |
| LCS 500-408410/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 408410 |
| 500-136575-19 MS | 3160-32-5 (0-3.5') | TCLP | Solid | 6020A | 408408 |
| 500-136575-19 DU | 3160-32-5 (0-3.5') | TCLP | Solid | 6020A | 408408 |

Analysis Batch: 409230

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 6010B | 408066 |

General Chemistry

Analysis Batch: 407988

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|----------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | Moisture | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | Moisture | |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | Moisture | |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | Moisture | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

General Chemistry (Continued)

Analysis Batch: 407988 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|--------------------|-----------|--------|----------|------------|
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | Moisture | |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | Moisture | |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | Moisture | |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | Moisture | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | Moisture | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | Moisture | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | Moisture | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | Moisture | |
| 500-136575-1 DU | 3160-16-4 (0-4') | Total/NA | Solid | Moisture | |

Analysis Batch: 408166

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|----------|------------|
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | Moisture | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | Moisture | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | Moisture | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | Moisture | |
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | Moisture | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | Moisture | |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | Moisture | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | Moisture | |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | Moisture | |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | Moisture | |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | Moisture | |
| 500-136575-24 DU | 3160-45-2 (5-6') | Total/NA | Solid | Moisture | |

Analysis Batch: 408326

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136575-1 | 3160-16-4 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-2 | 3160-16-3 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-3 | 3160-16-2 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-4 | 3160-16-1 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-5 | 3160-16-5 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-6 | 3160-23-1 (0-4.5') | Total/NA | Solid | 9045D | |
| 500-136575-7 | 3160-23-2 (0-4.5') | Total/NA | Solid | 9045D | |
| 500-136575-8 | 3160-25-1 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-9 | 3160-25-2 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-10 | 3160-26-2 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-11 | 3160-26-1 (0-4') | Total/NA | Solid | 9045D | |
| 500-136575-12 | 3160-28-1 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-13 | 3160-28-2 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-14 | 3160-28-3 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-15 | 3160-32-1 (0-3.5') | Total/NA | Solid | 9045D | |
| 500-136575-16 | 3160-32-2 (0-3.5') | Total/NA | Solid | 9045D | |
| 500-136575-17 | 3160-32-3 (0-3.5') | Total/NA | Solid | 9045D | |
| 500-136575-18 | 3160-32-4 (0-3.5') | Total/NA | Solid | 9045D | |
| 500-136575-19 | 3160-32-5 (0-3.5') | Total/NA | Solid | 9045D | |
| 500-136575-20 | 3160-32-6 (0-3.5') | Total/NA | Solid | 9045D | |
| 500-136575-21 | 3160-45-1 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-22 | 3160-45-1 (5-6') | Total/NA | Solid | 9045D | |
| 500-136575-23 | 3160-45-2 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-24 | 3160-45-2 (5-6') | Total/NA | Solid | 9045D | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

General Chemistry (Continued)

Analysis Batch: 408326 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 500-136575-25 | 3160-45-3 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-26 | 3160-45-3 (5-6') | Total/NA | Solid | 9045D | |
| 500-136575-27 | 3160-45-4 (0-5') | Total/NA | Solid | 9045D | |
| 500-136575-28 | 3160-45-4 (5-6') | Total/NA | Solid | 9045D | |
| 500-136575-29 | 3160-50-1 (0-2') | Total/NA | Solid | 9045D | |
| 500-136575-30 | 3160-50-2 (0-2') | Total/NA | Solid | 9045D | |
| 500-136575-31 | 3160-50-3 (0-2') | Total/NA | Solid | 9045D | |
| 500-136575-6 DU | 3160-23-1 (0-4.5') | Total/NA | Solid | 9045D | |
| 500-136575-25 DU | 3160-45-3 (0-5') | Total/NA | Solid | 9045D | |

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | BFB | DBFM | 12DCE | TOL |
|--------------------|------------------------|----------|----------|----------|----------|
| | | (75-131) | (75-126) | (70-134) | (75-124) |
| 500-136575-1 | 3160-16-4 (0-4') | 95 | 100 | 94 | 95 |
| 500-136575-2 | 3160-16-3 (0-4') | 86 | 96 | 96 | 98 |
| 500-136575-3 | 3160-16-2 (0-4') | 93 | 99 | 99 | 93 |
| 500-136575-4 | 3160-16-1 (0-4') | 88 | 99 | 97 | 92 |
| 500-136575-5 | 3160-16-5 (0-4') | 91 | 105 | 97 | 89 |
| 500-136575-6 | 3160-23-1 (0-4.5') | 88 | 98 | 98 | 91 |
| 500-136575-7 | 3160-23-2 (0-4.5') | 77 | 99 | 96 | 98 |
| 500-136575-8 | 3160-25-1 (0-4') | 75 | 97 | 98 | 99 |
| 500-136575-9 | 3160-25-2 (0-4') | 76 | 101 | 102 | 97 |
| 500-136575-10 | 3160-26-2 (0-4') | 89 | 100 | 99 | 91 |
| 500-136575-11 | 3160-26-1 (0-4') | 89 | 101 | 100 | 92 |
| 500-136575-12 | 3160-28-1 (0-5') | 89 | 98 | 98 | 93 |
| 500-136575-13 | 3160-28-2 (0-5') | 85 | 103 | 102 | 98 |
| 500-136575-14 | 3160-28-3 (0-5') | 84 | 97 | 95 | 99 |
| 500-136575-15 | 3160-32-1 (0-3.5') | 89 | 100 | 100 | 93 |
| 500-136575-16 | 3160-32-2 (0-3.5') | 89 | 101 | 100 | 95 |
| 500-136575-17 | 3160-32-3 (0-3.5') | 90 | 100 | 101 | 93 |
| 500-136575-18 | 3160-32-4 (0-3.5') | 90 | 99 | 98 | 93 |
| 500-136575-19 | 3160-32-5 (0-3.5') | 91 | 101 | 100 | 83 |
| 500-136575-20 | 3160-32-6 (0-3.5') | 87 | 102 | 98 | 95 |
| 500-136575-20 | 3160-32-6 (0-3.5') | 89 | 103 | 91 | 86 |
| 500-136575-21 | 3160-45-1 (0-5') | 87 | 103 | 99 | 96 |
| 500-136575-22 | 3160-45-1 (5-6') | 95 | 102 | 97 | 102 |
| 500-136575-23 | 3160-45-2 (0-5') | 89 | 102 | 100 | 96 |
| 500-136575-24 | 3160-45-2 (5-6') | 86 | 103 | 99 | 96 |
| 500-136575-25 | 3160-45-3 (0-5') | 89 | 102 | 101 | 93 |
| 500-136575-26 | 3160-45-3 (5-6') | 96 | 103 | 102 | 99 |
| 500-136575-27 | 3160-45-4 (0-5') | 87 | 100 | 91 | 90 |
| 500-136575-28 | 3160-45-4 (5-6') | 89 | 103 | 101 | 107 |
| 500-136575-29 | 3160-50-1 (0-2') | 90 | 102 | 100 | 84 |
| 500-136575-30 | 3160-50-2 (0-2') | 87 | 106 | 107 | 77 |
| 500-136575-31 | 3160-50-3 (0-2') | 77 | 108 | 105 | 102 |
| LCS 500-408095/4 | Lab Control Sample | 84 | 94 | 91 | 108 |
| LCS 500-408295/29 | Lab Control Sample | 88 | 97 | 93 | 89 |
| LCSD 500-408295/30 | Lab Control Sample Dup | 91 | 107 | 100 | 80 |
| MB 500-408095/6 | Method Blank | 84 | 96 | 91 | 91 |
| MB 500-408295/6 | Method Blank | 86 | 110 | 103 | 91 |

Surrogate Legend

- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane
- 12DCE = 1,2-Dichloroethane-d4 (Surr)
- TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|--------------------|--------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | FBP (44-121) | 2FP (46-133) | NBZ (41-120) | PHL (46-125) | TPH (35-160) | TBP (25-139) |
| 500-136575-1 | 3160-16-4 (0-4') | 83 | 102 | 86 | 105 | 105 | 82 |
| 500-136575-2 | 3160-16-3 (0-4') | 72 | 76 | 67 | 80 | 83 | 91 |
| 500-136575-3 | 3160-16-2 (0-4') | 74 | 88 | 70 | 83 | 86 | 91 |
| 500-136575-4 | 3160-16-1 (0-4') | 71 | 82 | 67 | 81 | 87 | 84 |
| 500-136575-5 | 3160-16-5 (0-4') | 85 | 97 | 92 | 98 | 99 | 76 |
| 500-136575-6 | 3160-23-1 (0-4.5') | 74 | 86 | 70 | 82 | 80 | 85 |
| 500-136575-7 | 3160-23-2 (0-4.5') | 79 | 89 | 83 | 87 | 89 | 73 |
| 500-136575-8 | 3160-25-1 (0-4') | 83 | 86 | 70 | 93 | 85 | 93 |
| 500-136575-9 | 3160-25-2 (0-4') | 87 | 100 | 77 | 104 | 89 | 106 |
| 500-136575-10 | 3160-26-2 (0-4') | 84 | 94 | 79 | 102 | 87 | 99 |
| 500-136575-11 | 3160-26-1 (0-4') | 74 | 84 | 70 | 88 | 81 | 92 |
| 500-136575-12 | 3160-28-1 (0-5') | 79 | 93 | 73 | 100 | 86 | 96 |
| 500-136575-13 | 3160-28-2 (0-5') | 69 | 86 | 65 | 86 | 76 | 82 |
| 500-136575-14 | 3160-28-3 (0-5') | 91 | 101 | 90 | 100 | 111 | 83 |
| 500-136575-14 - DL | 3160-28-3 (0-5') | 94 | 122 | 92 | 112 | 106 | 92 |
| 500-136575-15 | 3160-32-1 (0-3.5') | 68 | 82 | 63 | 84 | 78 | 65 |
| 500-136575-16 | 3160-32-2 (0-3.5') | 86 | 100 | 94 | 95 | 93 | 65 |
| 500-136575-16 MS | 3160-32-2 (0-3.5') | 85 | 86 | 86 | 92 | 86 | 70 |
| 500-136575-16 MSD | 3160-32-2 (0-3.5') | 85 | 74 | 83 | 90 | 94 | 67 |
| 500-136575-17 | 3160-32-3 (0-3.5') | 89 | 95 | 96 | 96 | 93 | 66 |
| 500-136575-18 | 3160-32-4 (0-3.5') | 91 | 99 | 91 | 103 | 89 | 78 |
| 500-136575-19 | 3160-32-5 (0-3.5') | 89 | 99 | 100 | 95 | 90 | 73 |
| 500-136575-20 | 3160-32-6 (0-3.5') | 90 | 98 | 93 | 89 | 93 | 71 |
| 500-136575-21 | 3160-45-1 (0-5') | 87 | 94 | 101 | 82 | 98 | 62 |
| 500-136575-22 | 3160-45-1 (5-6') | 86 | 91 | 92 | 78 | 89 | 62 |
| 500-136575-23 | 3160-45-2 (0-5') | 90 | 103 | 94 | 93 | 96 | 58 |
| 500-136575-24 | 3160-45-2 (5-6') | 91 | 96 | 94 | 90 | 91 | 56 |
| 500-136575-25 | 3160-45-3 (0-5') | 98 | 104 | 94 | 93 | 98 | 56 |
| 500-136575-26 | 3160-45-3 (5-6') | 92 | 103 | 96 | 93 | 96 | 61 |
| 500-136575-27 | 3160-45-4 (0-5') | 97 | 101 | 102 | 93 | 98 | 66 |
| 500-136575-28 | 3160-45-4 (5-6') | 90 | 102 | 89 | 88 | 98 | 62 |
| 500-136575-29 | 3160-50-1 (0-2') | 94 | 101 | 100 | 90 | 93 | 57 |
| 500-136575-30 | 3160-50-2 (0-2') | 87 | 95 | 93 | 85 | 86 | 57 |
| 500-136575-31 | 3160-50-3 (0-2') | 89 | 90 | 86 | 89 | 94 | 64 |
| LCS 500-408732/2-A | Lab Control Sample | 87 | 93 | 93 | 96 | 92 | 69 |
| LCS 500-408852/2-A | Lab Control Sample | 78 | 86 | 77 | 89 | 83 | 90 |
| MB 500-408732/1-A | Method Blank | 93 | 102 | 96 | 102 | 101 | 61 |
| MB 500-408852/1-A | Method Blank | 77 | 81 | 73 | 85 | 80 | 77 |

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

TestAmerica Chicago

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | DCB1 (33-148) | TCX1 (30-121) |
|--------------------|--------------------|------------------|------------------|
| 500-136575-6 | 3160-23-1 (0-4.5') | 78 | 77 |
| 500-136575-7 | 3160-23-2 (0-4.5') | 98 | 95 |
| LCS 500-408939/2-A | Lab Control Sample | 84 | 84 |
| MB 500-408939/1-A | Method Blank | 83 | 79 |

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | TCX1 (49-129) | DCB1 (37-121) |
|--------------------|--------------------|------------------|------------------|
| 500-136575-15 | 3160-32-1 (0-3.5') | 83 | 95 |
| 500-136575-16 | 3160-32-2 (0-3.5') | 80 | 100 |
| 500-136575-17 | 3160-32-3 (0-3.5') | 87 | 101 |
| 500-136575-18 | 3160-32-4 (0-3.5') | 75 | 86 |
| 500-136575-19 | 3160-32-5 (0-3.5') | 77 | 88 |
| 500-136575-20 | 3160-32-6 (0-3.5') | 71 | 87 |
| 500-136575-21 | 3160-45-1 (0-5') | 86 | 92 |
| 500-136575-22 | 3160-45-1 (5-6') | 85 | 93 |
| 500-136575-23 | 3160-45-2 (0-5') | 93 | 106 |
| 500-136575-24 | 3160-45-2 (5-6') | 88 | 100 |
| 500-136575-24 MS | 3160-45-2 (5-6') | 87 | 105 |
| 500-136575-24 MSD | 3160-45-2 (5-6') | 88 | 102 |
| LCS 500-408853/2-A | Lab Control Sample | 76 | 103 |
| MB 500-408853/1-A | Method Blank | 79 | 96 |

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | TCX2 (49-129) | DCB2 (37-121) |
|--------------------|--------------------|------------------|------------------|
| 500-136575-25 | 3160-45-3 (0-5') | 102 | 79 |
| 500-136575-26 | 3160-45-3 (5-6') | 109 | 86 |
| 500-136575-27 | 3160-45-4 (0-5') | 98 | 78 |
| 500-136575-28 | 3160-45-4 (5-6') | 95 | 79 |
| LCS 500-408939/3-A | Lab Control Sample | 109 | 108 |
| MB 500-408939/1-A | Method Blank | 114 | 115 |

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

TestAmerica Chicago

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | DCPA2 (25-120) |
|--------------------|--------------------|-------------------|
| 500-136575-6 | 3160-23-1 (0-4.5') | 54 |
| 500-136575-7 | 3160-23-2 (0-4.5') | 51 |
| LCS 500-409129/2-A | Lab Control Sample | 55 |
| MB 500-409129/1-A | Method Blank | 50 |

Surrogate Legend

DCPA = DCAA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408095/6

Matrix: Solid

Analysis Batch: 408095

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/02/17 11:51 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/02/17 11:51 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/02/17 11:51 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/02/17 11:51 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/02/17 11:51 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/02/17 11:51 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/02/17 11:51 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 84 | | 75 - 131 | | 11/02/17 11:51 | 1 |
| Dibromofluoromethane | 96 | | 75 - 126 | | 11/02/17 11:51 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 70 - 134 | | 11/02/17 11:51 | 1 |
| Toluene-d8 (Surr) | 91 | | 75 - 124 | | 11/02/17 11:51 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408095/4

Matrix: Solid

Analysis Batch: 408095

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0544 | | mg/Kg | | 109 | 40 - 150 |
| Benzene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 67 - 129 |
| Bromoform | 0.0500 | 0.0569 | | mg/Kg | | 114 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0574 | | mg/Kg | | 115 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0434 | | mg/Kg | | 87 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0521 | | mg/Kg | | 104 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0507 | | mg/Kg | | 101 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0466 | | mg/Kg | | 93 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0550 | | mg/Kg | | 110 | 75 - 125 |
| Chloroform | 0.0500 | 0.0489 | | mg/Kg | | 98 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0569 | | mg/Kg | | 114 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0543 | | mg/Kg | | 109 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0545 | | mg/Kg | | 109 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0508 | | mg/Kg | | 102 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0519 | | mg/Kg | | 104 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0502 | | mg/Kg | | 100 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0429 | | mg/Kg | | 86 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0488 | | mg/Kg | | 98 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0428 | | mg/Kg | | 86 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0513 | | mg/Kg | | 103 | 50 - 140 |
| Styrene | 0.0500 | 0.0545 | | mg/Kg | | 109 | 70 - 125 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0458 | | mg/Kg | | 92 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0535 | | mg/Kg | | 107 | 70 - 124 |
| Toluene | 0.0500 | 0.0537 | | mg/Kg | | 107 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0513 | | mg/Kg | | 103 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0534 | | mg/Kg | | 107 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0529 | | mg/Kg | | 106 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0632 | | mg/Kg | | 126 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0573 | | mg/Kg | | 115 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.103 | | mg/Kg | | 103 | 53 - 147 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 84 | | 75 - 131 |
| Dibromofluoromethane | 94 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 70 - 134 |
| Toluene-d8 (Surr) | 108 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-408295/6

Matrix: Solid

Analysis Batch: 408295

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/03/17 11:19 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/03/17 11:19 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/03/17 11:19 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/03/17 11:19 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/03/17 11:19 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/03/17 11:19 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/03/17 11:19 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 86 | | 75 - 131 | | 11/03/17 11:19 | 1 |
| Dibromofluoromethane | 110 | | 75 - 126 | | 11/03/17 11:19 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 103 | | 70 - 134 | | 11/03/17 11:19 | 1 |
| Toluene-d8 (Surr) | 91 | | 75 - 124 | | 11/03/17 11:19 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408295/29

Matrix: Solid

Analysis Batch: 408295

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0556 | | mg/Kg | | 111 | 40 - 150 |
| Benzene | 0.0500 | 0.0428 | | mg/Kg | | 86 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0420 | | mg/Kg | | 84 | 67 - 129 |
| Bromoform | 0.0500 | 0.0418 | | mg/Kg | | 84 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0466 | | mg/Kg | | 93 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0439 | | mg/Kg | | 88 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0433 | | mg/Kg | | 87 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0419 | | mg/Kg | | 84 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 75 - 125 |
| Chloroform | 0.0500 | 0.0423 | | mg/Kg | | 85 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0525 | | mg/Kg | | 105 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0436 | | mg/Kg | | 87 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0379 | | mg/Kg | | 76 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0367 | | mg/Kg | | 73 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0438 | | mg/Kg | | 88 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0444 | | mg/Kg | | 89 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0434 | | mg/Kg | | 87 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0414 | | mg/Kg | | 83 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0365 | | mg/Kg | | 73 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0419 | | mg/Kg | | 84 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0382 | | mg/Kg | | 76 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0449 | | mg/Kg | | 90 | 50 - 140 |
| Styrene | 0.0500 | 0.0421 | | mg/Kg | | 84 | 70 - 125 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0414 | | mg/Kg | | 83 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0387 | | mg/Kg | | 77 | 70 - 124 |
| Toluene | 0.0500 | 0.0381 | | mg/Kg | | 76 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0447 | | mg/Kg | | 89 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0389 | | mg/Kg | | 78 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0399 | | mg/Kg | | 80 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0443 | | mg/Kg | | 89 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0509 | | mg/Kg | | 102 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0528 | | mg/Kg | | 106 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.0829 | | mg/Kg | | 83 | 53 - 147 |

| Surrogate | LCS LCS | | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 |
| Dibromofluoromethane | 97 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 93 | | 70 - 134 |
| Toluene-d8 (Surr) | 89 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-408295/30

Matrix: Solid

Analysis Batch: 408295

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0580 | | mg/Kg | | 116 | 40 - 150 | 4 | 30 |
| Benzene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 125 | 16 | 30 |
| Bromodichloromethane | 0.0500 | 0.0457 | | mg/Kg | | 91 | 67 - 129 | 8 | 30 |
| Bromoform | 0.0500 | 0.0453 | | mg/Kg | | 91 | 68 - 136 | 8 | 30 |
| Bromomethane | 0.0500 | 0.0517 | | mg/Kg | | 103 | 70 - 130 | 11 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0427 | | mg/Kg | | 85 | 47 - 138 | 9 | 30 |
| Carbon disulfide | 0.0500 | 0.0524 | | mg/Kg | | 105 | 70 - 129 | 18 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0508 | | mg/Kg | | 102 | 75 - 125 | 16 | 30 |
| Chlorobenzene | 0.0500 | 0.0456 | | mg/Kg | | 91 | 50 - 150 | 9 | 30 |
| Chloroethane | 0.0500 | 0.0510 | | mg/Kg | | 102 | 75 - 125 | 2 | 30 |
| Chloroform | 0.0500 | 0.0495 | | mg/Kg | | 99 | 57 - 135 | 16 | 30 |
| Chloromethane | 0.0500 | 0.0523 | | mg/Kg | | 105 | 70 - 125 | 0 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0509 | | mg/Kg | | 102 | 70 - 125 | 15 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0372 | | mg/Kg | | 74 | 70 - 125 | 2 | 30 |
| Dibromochloromethane | 0.0500 | 0.0401 | | mg/Kg | | 80 | 69 - 125 | 9 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0515 | | mg/Kg | | 103 | 70 - 125 | 16 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0524 | | mg/Kg | | 105 | 70 - 130 | 17 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0537 | | mg/Kg | | 107 | 70 - 120 | 17 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 125 | 10 | 30 |
| Ethylbenzene | 0.0500 | 0.0446 | | mg/Kg | | 89 | 61 - 136 | 7 | 30 |
| 2-Hexanone | 0.0500 | 0.0286 | | mg/Kg | | 57 | 48 - 146 | 24 | 30 |
| Methylene Chloride | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 126 | 18 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0290 | | mg/Kg | | 58 | 50 - 148 | 27 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0518 | | mg/Kg | | 104 | 50 - 140 | 14 | 30 |
| Styrene | 0.0500 | 0.0464 | | mg/Kg | | 93 | 70 - 125 | 10 | 30 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0461 | | mg/Kg | | 92 | 70 - 122 | 11 | 30 |
| Tetrachloroethene | 0.0500 | 0.0382 | | mg/Kg | | 76 | 70 - 124 | 1 | 30 |
| Toluene | 0.0500 | 0.0361 | | mg/Kg | | 72 | 70 - 125 | 5 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0517 | | mg/Kg | | 103 | 70 - 125 | 14 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0379 | | mg/Kg | | 76 | 70 - 125 | 3 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 128 | 15 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0372 | | mg/Kg | | 74 | 70 - 125 | 7 | 30 |
| Trichloroethene | 0.0500 | 0.0472 | | mg/Kg | | 94 | 70 - 125 | 6 | 30 |
| Vinyl acetate | 0.0500 | 0.0572 | | mg/Kg | | 114 | 40 - 153 | 12 | 30 |
| Vinyl chloride | 0.0500 | 0.0527 | | mg/Kg | | 105 | 70 - 125 | 0 | 30 |
| Xylenes, Total | 0.100 | 0.0908 | | mg/Kg | | 91 | 53 - 147 | 9 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 |
| Dibromofluoromethane | 107 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 |
| Toluene-d8 (Surr) | 80 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408732/1-A

Matrix: Solid

Analysis Batch: 408867

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 408732

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Benzo[a]anthracene | 0.00556 | J | 0.033 | 0.0045 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-408732/1-A
Matrix: Solid
Analysis Batch: 408867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408732

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/07/17 07:18 | 11/07/17 20:48 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 93 | | 44 - 121 | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2-Fluorophenol | 102 | | 46 - 133 | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Nitrobenzene-d5 | 96 | | 41 - 120 | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Phenol-d5 | 102 | | 46 - 125 | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| Terphenyl-d14 | 101 | | 35 - 160 | 11/07/17 07:18 | 11/07/17 20:48 | 1 |
| 2,4,6-Tribromophenol | 61 | | 25 - 139 | 11/07/17 07:18 | 11/07/17 20:48 | 1 |

Lab Sample ID: LCS 500-408732/2-A
Matrix: Solid
Analysis Batch: 408867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408732

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 1.22 | | mg/Kg | | 92 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.16 | | mg/Kg | | 87 | 60 - 110 |
| Anthracene | 1.33 | 1.30 | | mg/Kg | | 98 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.22 | | mg/Kg | | 91 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.32 | | mg/Kg | | 99 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.36 | | mg/Kg | | 102 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.36 | | mg/Kg | | 102 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.34 | | mg/Kg | | 100 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.28 | | mg/Kg | | 96 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.12 | | mg/Kg | | 84 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.45 | | mg/Kg | | 109 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.06 | | mg/Kg | | 80 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.44 | | mg/Kg | | 108 | 61 - 116 |
| Carbazole | 1.33 | 1.37 | | mg/Kg | | 103 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 1.19 | | mg/Kg | | 89 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.15 | | mg/Kg | | 86 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.20 | | mg/Kg | | 90 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.20 | | mg/Kg | | 90 | 64 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408732/2-A
Matrix: Solid
Analysis Batch: 408867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408732

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Chlorophenyl phenyl ether | 1.33 | 1.13 | | mg/Kg | | 85 | 63 - 110 |
| Chrysene | 1.33 | 1.27 | | mg/Kg | | 95 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.45 | | mg/Kg | | 108 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.19 | | mg/Kg | | 89 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 1.12 | | mg/Kg | | 84 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 1.13 | | mg/Kg | | 84 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 1.16 | | mg/Kg | | 87 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 0.941 | | mg/Kg | | 71 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.14 | | mg/Kg | | 86 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.26 | | mg/Kg | | 94 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.25 | | mg/Kg | | 94 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.19 | | mg/Kg | | 89 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.33 | | mg/Kg | | 100 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.59 | | mg/Kg | | 60 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 1.51 | | mg/Kg | | 57 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.23 | | mg/Kg | | 92 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.24 | | mg/Kg | | 93 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.26 | | mg/Kg | | 94 | 63 - 119 |
| Fluoranthene | 1.33 | 1.16 | | mg/Kg | | 87 | 62 - 120 |
| Fluorene | 1.33 | 1.20 | | mg/Kg | | 90 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 0.993 | | mg/Kg | | 74 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 1.00 | | mg/Kg | | 75 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.762 | | mg/Kg | | 57 | 10 - 106 |
| Hexachloroethane | 1.33 | 1.17 | | mg/Kg | | 87 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.43 | | mg/Kg | | 107 | 57 - 127 |
| Isophorone | 1.33 | 1.21 | | mg/Kg | | 90 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.35 | | mg/Kg | | 101 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.14 | | mg/Kg | | 86 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.18 | | mg/Kg | | 88 | 57 - 120 |
| Naphthalene | 1.33 | 1.20 | | mg/Kg | | 90 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.32 | | mg/Kg | | 99 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.08 | | mg/Kg | | 81 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.54 | | mg/Kg | | 115 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.40 | | mg/Kg | | 105 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.20 | | mg/Kg | | 90 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 2.07 | | mg/Kg | | 77 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 1.18 | | mg/Kg | | 89 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.26 | | mg/Kg | | 94 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.19 | | mg/Kg | | 89 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.40 | | mg/Kg | | 53 | 13 - 112 |
| Phenanthrene | 1.33 | 1.24 | | mg/Kg | | 93 | 62 - 120 |
| Phenol | 1.33 | 1.10 | | mg/Kg | | 82 | 56 - 122 |
| Pyrene | 1.33 | 1.37 | | mg/Kg | | 102 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.15 | | mg/Kg | | 86 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.06 | | mg/Kg | | 79 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.15 | | mg/Kg | | 87 | 57 - 120 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408732/2-A
Matrix: Solid
Analysis Batch: 408867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408732

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 87 | | 44 - 121 |
| 2-Fluorophenol | 93 | | 46 - 133 |
| Nitrobenzene-d5 | 93 | | 41 - 120 |
| Phenol-d5 | 96 | | 46 - 125 |
| Terphenyl-d14 | 92 | | 35 - 160 |
| 2,4,6-Tribromophenol | 69 | | 25 - 139 |

Lab Sample ID: 500-136575-16 MS
Matrix: Solid
Analysis Batch: 408867

Client Sample ID: 3160-32-2 (0-3.5')
Prep Type: Total/NA
Prep Batch: 408732

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Acenaphthene | <0.040 | | 1.64 | 1.43 | | mg/Kg | ☼ | 87 | 58 - 110 |
| Acenaphthylene | <0.040 | | 1.64 | 1.36 | | mg/Kg | ☼ | 83 | 60 - 110 |
| Anthracene | 0.0086 | J | 1.64 | 1.61 | | mg/Kg | ☼ | 97 | 63 - 110 |
| Benzo[a]anthracene | 0.023 | J B | 1.64 | 1.52 | | mg/Kg | ☼ | 91 | 63 - 110 |
| Benzo[a]pyrene | 0.017 | J | 1.64 | 1.62 | | mg/Kg | ☼ | 98 | 61 - 120 |
| Benzo[b]fluoranthene | 0.038 | J | 1.64 | 1.85 | | mg/Kg | ☼ | 110 | 62 - 120 |
| Benzo[g,h,i]perylene | 0.019 | J F1 | 1.64 | 0.973 | F1 | mg/Kg | ☼ | 58 | 64 - 120 |
| Benzo[k]fluoranthene | 0.016 | J | 1.64 | 1.61 | | mg/Kg | ☼ | 97 | 65 - 120 |
| Bis(2-chloroethoxy)methane | <0.20 | | 1.64 | 1.41 | | mg/Kg | ☼ | 86 | 60 - 112 |
| Bis(2-chloroethyl)ether | <0.20 | | 1.64 | 1.23 | | mg/Kg | ☼ | 75 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 1.64 | 1.63 | | mg/Kg | ☼ | 99 | 63 - 118 |
| 4-Bromophenyl phenyl ether | <0.20 | | 1.64 | 1.38 | | mg/Kg | ☼ | 84 | 63 - 110 |
| Butyl benzyl phthalate | <0.20 | | 1.64 | 1.70 | | mg/Kg | ☼ | 104 | 61 - 116 |
| Carbazole | <0.20 | | 1.64 | 1.70 | | mg/Kg | ☼ | 104 | 59 - 158 |
| 4-Chloroaniline | <0.82 | | 1.64 | 1.06 | | mg/Kg | ☼ | 64 | 30 - 150 |
| 4-Chloro-3-methylphenol | <0.40 | | 1.64 | 1.34 | | mg/Kg | ☼ | 82 | 61 - 114 |
| 2-Chloronaphthalene | <0.20 | | 1.64 | 1.42 | | mg/Kg | ☼ | 86 | 64 - 110 |
| 2-Chlorophenol | <0.20 | | 1.64 | 1.30 | | mg/Kg | ☼ | 79 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 1.64 | 1.44 | | mg/Kg | ☼ | 87 | 63 - 110 |
| Chrysene | 0.035 | J | 1.64 | 1.57 | | mg/Kg | ☼ | 93 | 63 - 120 |
| Dibenz(a,h)anthracene | <0.040 | | 1.64 | 1.29 | | mg/Kg | ☼ | 78 | 64 - 119 |
| Dibenzofuran | <0.20 | | 1.64 | 1.45 | | mg/Kg | ☼ | 89 | 64 - 110 |
| 1,2-Dichlorobenzene | <0.20 | | 1.64 | 1.27 | | mg/Kg | ☼ | 77 | 62 - 110 |
| 1,3-Dichlorobenzene | <0.20 | | 1.64 | 1.23 | | mg/Kg | ☼ | 75 | 60 - 110 |
| 1,4-Dichlorobenzene | <0.20 | | 1.64 | 1.25 | | mg/Kg | ☼ | 76 | 61 - 110 |
| 3,3'-Dichlorobenzidine | <0.20 | F1 F2 | 1.64 | 0.410 | F1 | mg/Kg | ☼ | 25 | 49 - 112 |
| 2,4-Dichlorophenol | <0.40 | | 1.64 | 1.29 | | mg/Kg | ☼ | 79 | 58 - 120 |
| Diethyl phthalate | <0.20 | | 1.64 | 1.57 | | mg/Kg | ☼ | 96 | 58 - 120 |
| 2,4-Dimethylphenol | <0.40 | | 1.64 | 1.32 | | mg/Kg | ☼ | 81 | 60 - 110 |
| Dimethyl phthalate | <0.20 | | 1.64 | 1.46 | | mg/Kg | ☼ | 89 | 64 - 110 |
| Di-n-butyl phthalate | <0.20 | | 1.64 | 1.65 | | mg/Kg | ☼ | 101 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 3.28 | 1.59 | | mg/Kg | ☼ | 48 | 10 - 110 |
| 2,4-Dinitrophenol | <0.82 | | 3.28 | 1.44 | | mg/Kg | ☼ | 44 | 10 - 100 |
| 2,4-Dinitrotoluene | <0.20 | | 1.64 | 1.45 | | mg/Kg | ☼ | 88 | 62 - 117 |
| 2,6-Dinitrotoluene | <0.20 | | 1.64 | 1.47 | | mg/Kg | ☼ | 90 | 67 - 120 |
| Di-n-octyl phthalate | <0.20 | | 1.64 | 1.72 | | mg/Kg | ☼ | 105 | 63 - 119 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136575-16 MS

Matrix: Solid

Analysis Batch: 408867

Client Sample ID: 3160-32-2 (0-3.5')

Prep Type: Total/NA

Prep Batch: 408732

| Analyte | Sample | Sample | Spike | MS | MS | Unit | D | %Rec | %Rec. | Limits |
|------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | |
| Fluoranthene | 0.028 | J | 1.64 | 1.62 | | mg/Kg | ☼ | 97 | | 62 - 120 |
| Fluorene | <0.040 | | 1.64 | 1.47 | | mg/Kg | ☼ | 90 | | 62 - 120 |
| Hexachlorobenzene | <0.082 | | 1.64 | 1.29 | | mg/Kg | ☼ | 79 | | 55 - 117 |
| Hexachlorobutadiene | <0.20 | | 1.64 | 1.13 | | mg/Kg | ☼ | 69 | | 56 - 120 |
| Hexachlorocyclopentadiene | <0.82 | | 1.64 | 0.334 | J | mg/Kg | ☼ | 20 | | 10 - 106 |
| Hexachloroethane | <0.20 | | 1.64 | 1.22 | | mg/Kg | ☼ | 74 | | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 1.64 | 1.20 | | mg/Kg | ☼ | 73 | | 57 - 127 |
| Isophorone | <0.20 | | 1.64 | 1.37 | | mg/Kg | ☼ | 84 | | 55 - 110 |
| 2-Methylnaphthalene | 0.051 | J F1 | 1.64 | 1.90 | F1 | mg/Kg | ☼ | 112 | | 62 - 110 |
| 2-Methylphenol | <0.20 | | 1.64 | 1.48 | | mg/Kg | ☼ | 90 | | 60 - 120 |
| 3 & 4 Methylphenol | <0.20 | | 1.64 | 1.30 | | mg/Kg | ☼ | 79 | | 57 - 120 |
| Naphthalene | 0.027 | J | 1.64 | 1.39 | | mg/Kg | ☼ | 83 | | 63 - 110 |
| 2-Nitroaniline | <0.20 | | 1.64 | 1.56 | | mg/Kg | ☼ | 95 | | 57 - 124 |
| 3-Nitroaniline | <0.40 | | 1.64 | 1.52 | | mg/Kg | ☼ | 92 | | 40 - 122 |
| 4-Nitroaniline | <0.40 | | 1.64 | 2.07 | | mg/Kg | ☼ | 126 | | 60 - 160 |
| Nitrobenzene | <0.040 | | 1.64 | 1.60 | | mg/Kg | ☼ | 97 | | 60 - 116 |
| 2-Nitrophenol | <0.40 | | 1.64 | 1.38 | | mg/Kg | ☼ | 84 | | 60 - 120 |
| 4-Nitrophenol | <0.82 | | 3.28 | 2.18 | | mg/Kg | ☼ | 66 | | 30 - 122 |
| N-Nitrosodi-n-propylamine | <0.082 | | 1.64 | 1.30 | | mg/Kg | ☼ | 79 | | 56 - 118 |
| N-Nitrosodiphenylamine | <0.20 | | 1.64 | 1.52 | | mg/Kg | ☼ | 93 | | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 1.64 | 1.23 | | mg/Kg | ☼ | 75 | | 40 - 124 |
| Pentachlorophenol | <0.82 | | 3.28 | 2.03 | | mg/Kg | ☼ | 62 | | 13 - 112 |
| Phenanthrene | 0.057 | | 1.64 | 1.58 | | mg/Kg | ☼ | 93 | | 62 - 120 |
| Phenol | <0.20 | | 1.64 | 1.41 | | mg/Kg | ☼ | 86 | | 56 - 122 |
| Pyrene | 0.034 | J | 1.64 | 1.59 | | mg/Kg | ☼ | 95 | | 63 - 120 |
| 1,2,4-Trichlorobenzene | <0.20 | | 1.64 | 1.26 | | mg/Kg | ☼ | 77 | | 62 - 110 |
| 2,4,5-Trichlorophenol | <0.40 | | 1.64 | 1.22 | | mg/Kg | ☼ | 74 | | 50 - 120 |
| 2,4,6-Trichlorophenol | <0.40 | | 1.64 | 1.41 | | mg/Kg | ☼ | 86 | | 57 - 120 |

| Surrogate | MS | MS | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 2-Fluorobiphenyl | 85 | | 44 - 121 |
| 2-Fluorophenol | 86 | | 46 - 133 |
| Nitrobenzene-d5 | 86 | | 41 - 120 |
| Phenol-d5 | 92 | | 46 - 125 |
| Terphenyl-d14 | 86 | | 35 - 160 |
| 2,4,6-Tribromophenol | 70 | | 25 - 139 |

Lab Sample ID: 500-136575-16 MSD

Matrix: Solid

Analysis Batch: 408867

Client Sample ID: 3160-32-2 (0-3.5')

Prep Type: Total/NA

Prep Batch: 408732

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | Limits | RPD | Limit |
|----------------------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | | | |
| Acenaphthene | <0.040 | | 1.64 | 1.47 | | mg/Kg | ☼ | 89 | | 58 - 110 | 2 | 30 |
| Acenaphthylene | <0.040 | | 1.64 | 1.41 | | mg/Kg | ☼ | 86 | | 60 - 110 | 3 | 30 |
| Anthracene | 0.0086 | J | 1.64 | 1.71 | | mg/Kg | ☼ | 104 | | 63 - 110 | 6 | 30 |
| Benzo[a]anthracene | 0.023 | J B | 1.64 | 1.59 | | mg/Kg | ☼ | 96 | | 63 - 110 | 5 | 30 |
| Benzo[a]pyrene | 0.017 | J | 1.64 | 1.78 | | mg/Kg | ☼ | 107 | | 61 - 120 | 9 | 30 |
| Benzo[b]fluoranthene | 0.038 | J | 1.64 | 1.94 | | mg/Kg | ☼ | 116 | | 62 - 120 | 5 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136575-16 MSD

Matrix: Solid

Analysis Batch: 408867

Client Sample ID: 3160-32-2 (0-3.5')

Prep Type: Total/NA

Prep Batch: 408732

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | RPD | Limit |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | Limits | | |
| Benzo[g,h,i]perylene | 0.019 | J F1 | 1.64 | 1.04 | F1 | mg/Kg | ☼ | 62 | 64 - 120 | 7 | 30 |
| Benzo[k]fluoranthene | 0.016 | J | 1.64 | 1.88 | | mg/Kg | ☼ | 113 | 65 - 120 | 15 | 30 |
| Bis(2-chloroethoxy)methane | <0.20 | | 1.64 | 1.28 | | mg/Kg | ☼ | 78 | 60 - 112 | 10 | 30 |
| Bis(2-chloroethyl)ether | <0.20 | | 1.64 | 1.37 | | mg/Kg | ☼ | 84 | 55 - 111 | 11 | 30 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 1.64 | 1.84 | | mg/Kg | ☼ | 112 | 63 - 118 | 12 | 30 |
| 4-Bromophenyl phenyl ether | <0.20 | | 1.64 | 1.55 | | mg/Kg | ☼ | 95 | 63 - 110 | 12 | 30 |
| Butyl benzyl phthalate | <0.20 | | 1.64 | 1.81 | | mg/Kg | ☼ | 110 | 61 - 116 | 6 | 30 |
| Carbazole | <0.20 | | 1.64 | 1.79 | | mg/Kg | ☼ | 109 | 59 - 158 | 5 | 30 |
| 4-Chloroaniline | <0.82 | | 1.64 | 1.21 | | mg/Kg | ☼ | 73 | 30 - 150 | 13 | 30 |
| 4-Chloro-3-methylphenol | <0.40 | | 1.64 | 1.42 | | mg/Kg | ☼ | 86 | 61 - 114 | 6 | 30 |
| 2-Chloronaphthalene | <0.20 | | 1.64 | 1.39 | | mg/Kg | ☼ | 85 | 64 - 110 | 2 | 30 |
| 2-Chlorophenol | <0.20 | | 1.64 | 1.24 | | mg/Kg | ☼ | 76 | 64 - 110 | 5 | 30 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 1.64 | 1.44 | | mg/Kg | ☼ | 88 | 63 - 110 | 0 | 30 |
| Chrysene | 0.035 | J | 1.64 | 1.68 | | mg/Kg | ☼ | 101 | 63 - 120 | 7 | 30 |
| Dibenz(a,h)anthracene | <0.040 | | 1.64 | 1.35 | | mg/Kg | ☼ | 82 | 64 - 119 | 5 | 30 |
| Dibenzofuran | <0.20 | | 1.64 | 1.49 | | mg/Kg | ☼ | 91 | 64 - 110 | 2 | 30 |
| 1,2-Dichlorobenzene | <0.20 | | 1.64 | 1.29 | | mg/Kg | ☼ | 79 | 62 - 110 | 2 | 30 |
| 1,3-Dichlorobenzene | <0.20 | | 1.64 | 1.27 | | mg/Kg | ☼ | 77 | 60 - 110 | 3 | 30 |
| 1,4-Dichlorobenzene | <0.20 | | 1.64 | 1.30 | | mg/Kg | ☼ | 79 | 61 - 110 | 4 | 30 |
| 3,3'-Dichlorobenzidine | <0.20 | F1 F2 | 1.64 | 0.630 | F1 F2 | mg/Kg | ☼ | 38 | 49 - 112 | 42 | 30 |
| 2,4-Dichlorophenol | <0.40 | | 1.64 | 1.38 | | mg/Kg | ☼ | 84 | 58 - 120 | 7 | 30 |
| Diethyl phthalate | <0.20 | | 1.64 | 1.57 | | mg/Kg | ☼ | 96 | 58 - 120 | 0 | 30 |
| 2,4-Dimethylphenol | <0.40 | | 1.64 | 1.34 | | mg/Kg | ☼ | 82 | 60 - 110 | 1 | 30 |
| Dimethyl phthalate | <0.20 | | 1.64 | 1.49 | | mg/Kg | ☼ | 91 | 64 - 110 | 2 | 30 |
| Di-n-butyl phthalate | <0.20 | | 1.64 | 1.73 | | mg/Kg | ☼ | 105 | 65 - 120 | 4 | 30 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 3.28 | 1.57 | | mg/Kg | ☼ | 48 | 10 - 110 | 1 | 30 |
| 2,4-Dinitrophenol | <0.82 | | 3.28 | 1.47 | | mg/Kg | ☼ | 45 | 10 - 100 | 2 | 30 |
| 2,4-Dinitrotoluene | <0.20 | | 1.64 | 1.45 | | mg/Kg | ☼ | 88 | 62 - 117 | 0 | 30 |
| 2,6-Dinitrotoluene | <0.20 | | 1.64 | 1.51 | | mg/Kg | ☼ | 92 | 67 - 120 | 3 | 30 |
| Di-n-octyl phthalate | <0.20 | | 1.64 | 1.78 | | mg/Kg | ☼ | 109 | 63 - 119 | 3 | 30 |
| Fluoranthene | 0.028 | J | 1.64 | 1.62 | | mg/Kg | ☼ | 97 | 62 - 120 | 0 | 30 |
| Fluorene | <0.040 | | 1.64 | 1.48 | | mg/Kg | ☼ | 90 | 62 - 120 | 1 | 30 |
| Hexachlorobenzene | <0.082 | | 1.64 | 1.42 | | mg/Kg | ☼ | 87 | 55 - 117 | 10 | 30 |
| Hexachlorobutadiene | <0.20 | | 1.64 | 1.11 | | mg/Kg | ☼ | 68 | 56 - 120 | 1 | 30 |
| Hexachlorocyclopentadiene | <0.82 | | 1.64 | 0.325 | J | mg/Kg | ☼ | 20 | 10 - 106 | 3 | 30 |
| Hexachloroethane | <0.20 | | 1.64 | 1.25 | | mg/Kg | ☼ | 76 | 61 - 110 | 3 | 30 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 1.64 | 1.28 | | mg/Kg | ☼ | 78 | 57 - 127 | 6 | 30 |
| Isophorone | <0.20 | | 1.64 | 1.28 | | mg/Kg | ☼ | 78 | 55 - 110 | 7 | 30 |
| 2-Methylnaphthalene | 0.051 | J F1 | 1.64 | 1.80 | | mg/Kg | ☼ | 107 | 62 - 110 | 5 | 30 |
| 2-Methylphenol | <0.20 | | 1.64 | 1.24 | | mg/Kg | ☼ | 75 | 60 - 120 | 18 | 30 |
| 3 & 4 Methylphenol | <0.20 | | 1.64 | 1.34 | | mg/Kg | ☼ | 82 | 57 - 120 | 3 | 30 |
| Naphthalene | 0.027 | J | 1.64 | 1.40 | | mg/Kg | ☼ | 84 | 63 - 110 | 1 | 30 |
| 2-Nitroaniline | <0.20 | | 1.64 | 1.49 | | mg/Kg | ☼ | 91 | 57 - 124 | 5 | 30 |
| 3-Nitroaniline | <0.40 | | 1.64 | 1.45 | | mg/Kg | ☼ | 89 | 40 - 122 | 4 | 30 |
| 4-Nitroaniline | <0.40 | | 1.64 | 2.04 | | mg/Kg | ☼ | 125 | 60 - 160 | 1 | 30 |
| Nitrobenzene | <0.040 | | 1.64 | 1.52 | | mg/Kg | ☼ | 93 | 60 - 116 | 5 | 30 |
| 2-Nitrophenol | <0.40 | | 1.64 | 1.27 | | mg/Kg | ☼ | 78 | 60 - 120 | 8 | 30 |
| 4-Nitrophenol | <0.82 | | 3.28 | 2.41 | | mg/Kg | ☼ | 73 | 30 - 122 | 10 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136575-16 MSD
Matrix: Solid
Analysis Batch: 408867

Client Sample ID: 3160-32-2 (0-3.5')
Prep Type: Total/NA
Prep Batch: 408732

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| N-Nitrosodi-n-propylamine | <0.082 | | 1.64 | 1.23 | | mg/Kg | ☼ | 75 | 56 - 118 | 6 | 30 |
| N-Nitrosodiphenylamine | <0.20 | | 1.64 | 1.68 | | mg/Kg | ☼ | 102 | 65 - 112 | 10 | 30 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 1.64 | 1.25 | | mg/Kg | ☼ | 76 | 40 - 124 | 2 | 30 |
| Pentachlorophenol | <0.82 | | 3.28 | 2.39 | | mg/Kg | ☼ | 73 | 13 - 112 | 17 | 30 |
| Phenanthrene | 0.057 | | 1.64 | 1.67 | | mg/Kg | ☼ | 98 | 62 - 120 | 5 | 30 |
| Phenol | <0.20 | | 1.64 | 1.35 | | mg/Kg | ☼ | 83 | 56 - 122 | 4 | 30 |
| Pyrene | 0.034 | J | 1.64 | 1.70 | | mg/Kg | ☼ | 102 | 63 - 120 | 7 | 30 |
| 1,2,4-Trichlorobenzene | <0.20 | | 1.64 | 1.26 | | mg/Kg | ☼ | 77 | 62 - 110 | 1 | 30 |
| 2,4,5-Trichlorophenol | <0.40 | | 1.64 | 1.44 | | mg/Kg | ☼ | 88 | 50 - 120 | 16 | 30 |
| 2,4,6-Trichlorophenol | <0.40 | | 1.64 | 1.48 | | mg/Kg | ☼ | 90 | 57 - 120 | 5 | 30 |

| Surrogate | MSD %Recovery | MSD Qualifier | MSD Limits |
|----------------------|---------------|---------------|------------|
| 2-Fluorobiphenyl | 85 | | 44 - 121 |
| 2-Fluorophenol | 74 | | 46 - 133 |
| Nitrobenzene-d5 | 83 | | 41 - 120 |
| Phenol-d5 | 90 | | 46 - 125 |
| Terphenyl-d14 | 94 | | 35 - 160 |
| 2,4,6-Tribromophenol | 67 | | 25 - 139 |

Lab Sample ID: MB 500-408852/1-A
Matrix: Solid
Analysis Batch: 408968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408852

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-408852/1-A
Matrix: Solid
Analysis Batch: 408968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408852

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/07/17 16:14 | 11/08/17 12:36 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 2-Fluorobiphenyl | 77 | | 44 - 121 | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2-Fluorophenol | 81 | | 46 - 133 | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Nitrobenzene-d5 | 73 | | 41 - 120 | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Phenol-d5 | 85 | | 46 - 125 | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| Terphenyl-d14 | 80 | | 35 - 160 | 11/07/17 16:14 | 11/08/17 12:36 | 1 |
| 2,4,6-Tribromophenol | 77 | | 25 - 139 | 11/07/17 16:14 | 11/08/17 12:36 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Lab Sample ID: LCS 500-408852/2-A
Matrix: Solid
Analysis Batch: 408968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408852
%Rec. Limits

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 1.04 | | mg/Kg | | 78 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.06 | | mg/Kg | | 80 | 60 - 110 |
| Anthracene | 1.33 | 1.11 | | mg/Kg | | 84 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.15 | | mg/Kg | | 87 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.14 | | mg/Kg | | 85 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.23 | | mg/Kg | | 92 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.19 | | mg/Kg | | 89 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.13 | | mg/Kg | | 85 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.12 | | mg/Kg | | 84 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.15 | | mg/Kg | | 86 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.31 | | mg/Kg | | 98 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.17 | | mg/Kg | | 87 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.26 | | mg/Kg | | 94 | 61 - 116 |
| Carbazole | 1.33 | 1.36 | | mg/Kg | | 102 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 0.981 | | mg/Kg | | 74 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.18 | | mg/Kg | | 88 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.06 | | mg/Kg | | 80 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.07 | | mg/Kg | | 81 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | 1.33 | 1.08 | | mg/Kg | | 81 | 63 - 110 |
| Chrysene | 1.33 | 1.14 | | mg/Kg | | 86 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.26 | | mg/Kg | | 94 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.07 | | mg/Kg | | 81 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 1.06 | | mg/Kg | | 79 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 1.03 | | mg/Kg | | 77 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 1.03 | | mg/Kg | | 77 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 1.10 | | mg/Kg | | 82 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.15 | | mg/Kg | | 86 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.09 | | mg/Kg | | 82 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.19 | | mg/Kg | | 89 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.10 | | mg/Kg | | 82 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.17 | | mg/Kg | | 88 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.52 | | mg/Kg | | 57 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 1.08 | | mg/Kg | | 41 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.20 | | mg/Kg | | 90 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.13 | | mg/Kg | | 85 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.43 | | mg/Kg | | 107 | 63 - 119 |
| Fluoranthene | 1.33 | 1.19 | | mg/Kg | | 89 | 62 - 120 |
| Fluorene | 1.33 | 1.06 | | mg/Kg | | 79 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.11 | | mg/Kg | | 83 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 1.03 | | mg/Kg | | 77 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.898 | | mg/Kg | | 67 | 10 - 106 |
| Hexachloroethane | 1.33 | 1.04 | | mg/Kg | | 78 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.25 | | mg/Kg | | 94 | 57 - 127 |
| Isophorone | 1.33 | 1.05 | | mg/Kg | | 79 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.09 | | mg/Kg | | 82 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.16 | | mg/Kg | | 87 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.11 | | mg/Kg | | 83 | 57 - 120 |
| Naphthalene | 1.33 | 1.08 | | mg/Kg | | 81 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.13 | | mg/Kg | | 85 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.09 | | mg/Kg | | 82 | 40 - 122 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408852/2-A
Matrix: Solid
Analysis Batch: 408968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408852

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Nitroaniline | 1.33 | 1.56 | | mg/Kg | | 117 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.05 | | mg/Kg | | 79 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.21 | | mg/Kg | | 91 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 1.95 | | mg/Kg | | 73 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 1.12 | | mg/Kg | | 84 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.17 | | mg/Kg | | 88 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.16 | | mg/Kg | | 87 | 40 - 124 |
| Pentachlorophenol | 2.67 | 2.02 | | mg/Kg | | 76 | 13 - 112 |
| Phenanthrene | 1.33 | 1.12 | | mg/Kg | | 84 | 62 - 120 |
| Phenol | 1.33 | 1.09 | | mg/Kg | | 82 | 56 - 122 |
| Pyrene | 1.33 | 1.13 | | mg/Kg | | 85 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.06 | | mg/Kg | | 80 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.19 | | mg/Kg | | 89 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 57 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 78 | | 44 - 121 |
| 2-Fluorophenol | 86 | | 46 - 133 |
| Nitrobenzene-d5 | 77 | | 41 - 120 |
| Phenol-d5 | 89 | | 46 - 125 |
| Terphenyl-d14 | 83 | | 35 - 160 |
| 2,4,6-Tribromophenol | 90 | | 25 - 139 |

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|--------------|--------|---------|-------|---|----------------|----------------|---------|
| Aldrin | <0.0017 | | 0.0017 | 0.00069 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| alpha-BHC | <0.0017 | | 0.0017 | 0.00042 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| alpha-Chlordane | <0.0017 | | 0.0017 | 0.00085 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| beta-BHC | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| 4,4'-DDD | <0.0017 | | 0.0017 | 0.00033 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| 4,4'-DDE | <0.0017 | | 0.0017 | 0.00028 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| 4,4'-DDT | <0.0017 | | 0.0017 | 0.00088 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| delta-BHC | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Dieldrin | <0.0017 | | 0.0017 | 0.00023 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endosulfan I | <0.0017 | | 0.0017 | 0.00073 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endosulfan II | <0.0017 | | 0.0017 | 0.00027 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endosulfan sulfate | <0.0017 | | 0.0017 | 0.00031 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endrin | <0.0017 | | 0.0017 | 0.00023 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endrin aldehyde | <0.0017 | | 0.0017 | 0.00028 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endrin ketone | <0.0017 | | 0.0017 | 0.00038 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| gamma-BHC (Lindane) | <0.0017 | | 0.0017 | 0.00036 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| gamma-Chlordane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Heptachlor | <0.0017 | | 0.0017 | 0.00070 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB MB | | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Heptachlor epoxide | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Methoxychlor | <0.0083 | | 0.0083 | 0.00032 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Toxaphene | <0.017 | | 0.017 | 0.0070 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |

| Surrogate | MB MB | | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| DCB Decachlorobiphenyl | 83 | | 33 - 148 | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Tetrachloro-m-xylene | 79 | | 30 - 121 | 11/08/17 07:22 | 11/08/17 20:52 | 1 |

Lab Sample ID: LCS 500-408939/2-A
Matrix: Solid
Analysis Batch: 409066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------|-------------|------------|---------------|-------|---|------|--------------|
| | | | | | | | |
| alpha-BHC | 0.0133 | 0.0113 | | mg/Kg | | 84 | 50 - 123 |
| alpha-Chlordane | 0.0133 | 0.0105 | | mg/Kg | | 78 | 52 - 129 |
| beta-BHC | 0.0133 | 0.0125 | | mg/Kg | | 94 | 44 - 140 |
| 4,4'-DDD | 0.0133 | 0.0114 | | mg/Kg | | 86 | 47 - 137 |
| 4,4'-DDE | 0.0133 | 0.0107 | | mg/Kg | | 80 | 50 - 130 |
| 4,4'-DDT | 0.0133 | 0.0109 | | mg/Kg | | 82 | 46 - 143 |
| delta-BHC | 0.0133 | 0.0127 | | mg/Kg | | 96 | 57 - 125 |
| Dieldrin | 0.0133 | 0.0108 | | mg/Kg | | 81 | 51 - 133 |
| Endosulfan I | 0.0133 | 0.00822 | | mg/Kg | | 62 | 30 - 120 |
| Endosulfan II | 0.0133 | 0.00942 | | mg/Kg | | 71 | 30 - 120 |
| Endosulfan sulfate | 0.0133 | 0.0138 | | mg/Kg | | 104 | 42 - 150 |
| Endrin | 0.0133 | 0.0119 | | mg/Kg | | 89 | 43 - 144 |
| Endrin aldehyde | 0.0133 | 0.0114 | | mg/Kg | | 85 | 39 - 131 |
| Endrin ketone | 0.0133 | 0.0111 | | mg/Kg | | 84 | 51 - 135 |
| gamma-BHC (Lindane) | 0.0133 | 0.0111 | | mg/Kg | | 83 | 50 - 122 |
| gamma-Chlordane | 0.0133 | 0.0101 | | mg/Kg | | 76 | 52 - 132 |
| Heptachlor | 0.0133 | 0.0113 | | mg/Kg | | 85 | 53 - 129 |
| Heptachlor epoxide | 0.0133 | 0.0108 | | mg/Kg | | 81 | 50 - 139 |
| Methoxychlor | 0.0133 | 0.0102 | | mg/Kg | | 77 | 45 - 144 |

| Surrogate | LCS LCS | | Limits |
|------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| DCB Decachlorobiphenyl | 84 | | 33 - 148 |
| Tetrachloro-m-xylene | 84 | | 30 - 121 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-408853/1-A
Matrix: Solid
Analysis Batch: 409369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408853

| Analyte | MB MB | | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| PCB-1016 | <0.017 | | 0.017 | 0.0059 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |
| PCB-1221 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 500-408853/1-A
Matrix: Solid
Analysis Batch: 409369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408853

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1232 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |
| PCB-1242 | <0.017 | | 0.017 | 0.0055 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |
| PCB-1248 | <0.017 | | 0.017 | 0.0066 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |
| PCB-1254 | <0.017 | | 0.017 | 0.0036 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |
| PCB-1260 | <0.017 | | 0.017 | 0.0082 | mg/Kg | | 11/07/17 16:20 | 11/10/17 14:44 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|--------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 79 | | 49 - 129 | 11/07/17 16:20 | 11/10/17 14:44 | 1 |
| DCB Decachlorobiphenyl | 96 | | 37 - 121 | 11/07/17 16:20 | 11/10/17 14:44 | 1 |

Lab Sample ID: LCS 500-408853/2-A
Matrix: Solid
Analysis Batch: 409369

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408853

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| PCB-1016 | 0.167 | 0.119 | | mg/Kg | | 72 | 57 - 120 |
| PCB-1260 | 0.167 | 0.145 | | mg/Kg | | 87 | 61 - 125 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------|---------------|---------------|----------|
| Tetrachloro-m-xylene | 76 | | 49 - 129 |
| DCB Decachlorobiphenyl | 103 | | 37 - 121 |

Lab Sample ID: 500-136575-24 MS
Matrix: Solid
Analysis Batch: 409369

Client Sample ID: 3160-45-2 (5-6')
Prep Type: Total/NA
Prep Batch: 408853

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| PCB-1016 | <0.020 | | 0.198 | 0.177 | | mg/Kg | ☼ | 89 | 57 - 120 |
| PCB-1260 | <0.020 | | 0.198 | 0.187 | | mg/Kg | ☼ | 94 | 61 - 125 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|------------------------|--------------|--------------|----------|
| Tetrachloro-m-xylene | 87 | | 49 - 129 |
| DCB Decachlorobiphenyl | 105 | | 37 - 121 |

Lab Sample ID: 500-136575-24 MSD
Matrix: Solid
Analysis Batch: 409369

Client Sample ID: 3160-45-2 (5-6')
Prep Type: Total/NA
Prep Batch: 408853

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| PCB-1016 | <0.020 | | 0.198 | 0.175 | | mg/Kg | ☼ | 88 | 57 - 120 | 1 | 30 |
| PCB-1260 | <0.020 | | 0.198 | 0.179 | | mg/Kg | ☼ | 90 | 61 - 125 | 4 | 30 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|------------------------|---------------|---------------|----------|
| Tetrachloro-m-xylene | 88 | | 49 - 129 |
| DCB Decachlorobiphenyl | 102 | | 37 - 121 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.017 | | 0.017 | 0.0059 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1221 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1232 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1242 | <0.017 | | 0.017 | 0.0055 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1248 | <0.017 | | 0.017 | 0.0066 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1254 | <0.017 | | 0.017 | 0.0036 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1260 | <0.017 | | 0.017 | 0.0082 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|--------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 114 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| DCB Decachlorobiphenyl | 115 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 10:25 | 1 |

Lab Sample ID: LCS 500-408939/3-A
Matrix: Solid
Analysis Batch: 409181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| PCB-1016 | 0.167 | 0.177 | | mg/Kg | | 106 | 57 - 120 |
| PCB-1260 | 0.167 | 0.176 | | mg/Kg | | 106 | 61 - 125 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------|---------------|---------------|----------|
| Tetrachloro-m-xylene | 109 | | 49 - 129 |
| DCB Decachlorobiphenyl | 108 | | 37 - 121 |

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-409129/1-A
Matrix: Solid
Analysis Batch: 409021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409129

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|-----------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.33 | | 0.33 | 0.069 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| Dichlorprop | <0.33 | | 0.33 | 0.090 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| 2,4-D | <0.33 | | 0.33 | 0.094 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| Silvex (2,4,5-TP) | <0.33 | | 0.33 | 0.085 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| 2,4,5-T | <0.33 | | 0.33 | 0.081 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| 2,4-DB | <0.33 | | 0.33 | 0.098 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|--------------|--------------|----------|----------------|----------------|---------|
| DCAA | 50 | | 25 - 120 | 11/08/17 22:08 | 11/10/17 02:41 | 10 |

Lab Sample ID: LCS 500-409129/2-A
Matrix: Solid
Analysis Batch: 409021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409129

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|-------|---|------|--------------|
| Dicamba | 1.33 | 0.790 | | mg/Kg | | 59 | 25 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 500-409129/2-A
Matrix: Solid
Analysis Batch: 409021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409129

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------------|-------------|------------|---------------|-------|---|------|--------------|
| Dichlorprop | 1.34 | 0.771 | | mg/Kg | | 58 | 25 - 110 |
| 2,4-D | 1.33 | 0.618 | | mg/Kg | | 46 | 20 - 115 |
| Silvex (2,4,5-TP) | 1.34 | 0.784 | | mg/Kg | | 59 | 29 - 115 |
| 2,4,5-T | 1.33 | 0.848 | | mg/Kg | | 64 | 25 - 115 |
| 2,4-DB | 1.33 | 0.897 | | mg/Kg | | 67 | 20 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------|---------------|---------------|----------|
| DCAA | 55 | | 25 - 120 |

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-408066/1-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Cadmium | <0.20 | | 0.20 | 0.036 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/02/17 07:14 | 11/02/17 17:49 | 1 |

Lab Sample ID: LCS 500-408066/2-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|-------|---|------|--------------|
| Antimony | 50.0 | 43.5 | | mg/Kg | | 87 | 80 - 120 |
| Arsenic | 10.0 | 8.87 | | mg/Kg | | 89 | 80 - 120 |
| Barium | 200 | 189 | | mg/Kg | | 95 | 80 - 120 |
| Beryllium | 5.00 | 4.52 | | mg/Kg | | 90 | 80 - 120 |
| Cadmium | 5.00 | 4.78 | | mg/Kg | | 96 | 80 - 120 |
| Chromium | 20.0 | 19.2 | | mg/Kg | | 96 | 80 - 120 |
| Cobalt | 50.0 | 47.6 | | mg/Kg | | 95 | 80 - 120 |
| Copper | 25.0 | 24.0 | | mg/Kg | | 96 | 80 - 120 |
| Iron | 100 | 104 | | mg/Kg | | 104 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-408066/2-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|-------|---|------|--------------|
| Lead | 10.0 | 9.44 | | mg/Kg | | 94 | 80 - 120 |
| Manganese | 50.0 | 45.8 | | mg/Kg | | 92 | 80 - 120 |
| Nickel | 50.0 | 47.0 | | mg/Kg | | 94 | 80 - 120 |
| Selenium | 10.0 | 8.54 | | mg/Kg | | 85 | 80 - 120 |
| Silver | 5.00 | 4.59 | | mg/Kg | | 92 | 80 - 120 |
| Thallium | 10.0 | 9.03 | | mg/Kg | | 90 | 80 - 120 |
| Vanadium | 50.0 | 47.0 | | mg/Kg | | 94 | 80 - 120 |
| Zinc | 50.0 | 46.1 | | mg/Kg | | 92 | 80 - 120 |

Lab Sample ID: 500-136575-31 MS
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Antimony | <1.2 | F1 | 29.7 | 4.55 | F1 | mg/Kg | ☼ | 15 | 75 - 125 |
| Arsenic | 7.3 | | 5.95 | 12.9 | | mg/Kg | ☼ | 93 | 75 - 125 |
| Barium | 66 | | 119 | 171 | | mg/Kg | ☼ | 88 | 75 - 125 |
| Beryllium | 0.42 | | 2.97 | 2.88 | | mg/Kg | ☼ | 83 | 75 - 125 |
| Cadmium | 0.11 | J | 2.97 | 2.61 | | mg/Kg | ☼ | 84 | 75 - 125 |
| Chromium | 22 | | 11.9 | 33.2 | | mg/Kg | ☼ | 98 | 75 - 125 |
| Cobalt | 6.2 | | 29.7 | 35.6 | | mg/Kg | ☼ | 99 | 75 - 125 |
| Copper | 17 | | 14.9 | 31.8 | | mg/Kg | ☼ | 97 | 75 - 125 |
| Iron | 21000 | | 59.5 | 23100 | 4 | mg/Kg | ☼ | 2947 | 75 - 125 |
| Lead | 19 | F2 F1 | 5.95 | 31.0 | F1 | mg/Kg | ☼ | 206 | 75 - 125 |
| Manganese | 190 | | 29.7 | 278 | 4 | mg/Kg | ☼ | 310 | 75 - 125 |
| Nickel | 14 | | 29.7 | 43.0 | | mg/Kg | ☼ | 98 | 75 - 125 |
| Selenium | 0.49 | J F1 | 5.95 | 4.94 | | mg/Kg | ☼ | 75 | 75 - 125 |
| Silver | <0.31 | | 2.97 | 2.36 | | mg/Kg | ☼ | 79 | 75 - 125 |
| Thallium | <0.61 | | 5.95 | 4.91 | | mg/Kg | ☼ | 83 | 75 - 125 |
| Vanadium | 37 | | 29.7 | 67.5 | | mg/Kg | ☼ | 104 | 75 - 125 |
| Zinc | 53 | | 29.7 | 85.2 | | mg/Kg | ☼ | 108 | 75 - 125 |

Lab Sample ID: 500-136575-31 MSD
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Antimony | <1.2 | F1 | 30.1 | 5.09 | F1 | mg/Kg | ☼ | 17 | 75 - 125 | 11 | 20 |
| Arsenic | 7.3 | | 6.02 | 13.5 | | mg/Kg | ☼ | 103 | 75 - 125 | 5 | 20 |
| Barium | 66 | | 120 | 166 | | mg/Kg | ☼ | 83 | 75 - 125 | 3 | 20 |
| Beryllium | 0.42 | | 3.01 | 2.84 | | mg/Kg | ☼ | 80 | 75 - 125 | 1 | 20 |
| Cadmium | 0.11 | J | 3.01 | 2.57 | | mg/Kg | ☼ | 82 | 75 - 125 | 1 | 20 |
| Chromium | 22 | | 12.0 | 33.7 | | mg/Kg | ☼ | 101 | 75 - 125 | 1 | 20 |
| Cobalt | 6.2 | | 30.1 | 35.2 | | mg/Kg | ☼ | 96 | 75 - 125 | 1 | 20 |
| Copper | 17 | | 15.0 | 32.2 | | mg/Kg | ☼ | 98 | 75 - 125 | 1 | 20 |
| Iron | 21000 | | 60.2 | 23300 | 4 | mg/Kg | ☼ | 3351 | 75 - 125 | 1 | 20 |
| Lead | 19 | F2 F1 | 6.02 | 39.3 | F1 F2 | mg/Kg | ☼ | 341 | 75 - 125 | 24 | 20 |
| Manganese | 190 | | 30.1 | 273 | 4 | mg/Kg | ☼ | 289 | 75 - 125 | 2 | 20 |
| Nickel | 14 | | 30.1 | 43.0 | | mg/Kg | ☼ | 97 | 75 - 125 | 0 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136575-31 MSD
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Sample | Sample | Spike | MSD | | Unit | D | %Rec | %Rec. | Limits | RPD | RPD | Limit |
|----------|--------|-----------|-------|--------|-----------|-------|---|------|----------|--------|-----|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | | | | | |
| Selenium | 0.49 | J F1 | 6.02 | 4.92 | F1 | mg/Kg | ☼ | 74 | 75 - 125 | 0 | 20 | | |
| Silver | <0.31 | | 3.01 | 2.36 | | mg/Kg | ☼ | 78 | 75 - 125 | 0 | 20 | | |
| Thallium | <0.61 | | 6.02 | 4.87 | | mg/Kg | ☼ | 81 | 75 - 125 | 1 | 20 | | |
| Vanadium | 37 | | 30.1 | 68.7 | | mg/Kg | ☼ | 107 | 75 - 125 | 2 | 20 | | |
| Zinc | 53 | | 30.1 | 88.7 | | mg/Kg | ☼ | 119 | 75 - 125 | 4 | 20 | | |

Lab Sample ID: 500-136575-31 DU
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408066

| Analyte | Sample | Sample | DU | | Unit | D | RPD | Limit |
|-----------|--------|-----------|--------|-----------|-------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Antimony | <1.2 | F1 | <1.2 | | mg/Kg | ☼ | NC | 20 |
| Arsenic | 7.3 | | 9.19 | F3 | mg/Kg | ☼ | 23 | 20 |
| Barium | 66 | | 66.3 | | mg/Kg | ☼ | 0.2 | 20 |
| Beryllium | 0.42 | | 0.426 | | mg/Kg | ☼ | 1 | 20 |
| Cadmium | 0.11 | J | 0.173 | F5 | mg/Kg | ☼ | 44 | 20 |
| Chromium | 22 | | 20.3 | | mg/Kg | ☼ | 6 | 20 |
| Cobalt | 6.2 | | 6.87 | | mg/Kg | ☼ | 10 | 20 |
| Copper | 17 | | 18.8 | | mg/Kg | ☼ | 8 | 20 |
| Iron | 21000 | | 25200 | | mg/Kg | ☼ | 16 | 20 |
| Lead | 19 | F2 F1 | 40.8 | F3 | mg/Kg | ☼ | 74 | 20 |
| Manganese | 190 | | 295 | F3 | mg/Kg | ☼ | 45 | 20 |
| Nickel | 14 | | 14.6 | | mg/Kg | ☼ | 4 | 20 |
| Selenium | 0.49 | J F1 | 1.08 | F5 | mg/Kg | ☼ | 74 | 20 |
| Silver | <0.31 | | <0.30 | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.61 | | <0.60 | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 37 | | 35.1 | | mg/Kg | ☼ | 4 | 20 |
| Zinc | 53 | | 60.9 | | mg/Kg | ☼ | 14 | 20 |

Lab Sample ID: MB 500-408083/1-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408083

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Cadmium | 0.0466 | J | 0.20 | 0.036 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Iron | 11.1 | J | 20 | 10 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-408083/1-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408083

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|------|-------|---|----------------|----------------|---------|
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/02/17 07:49 | 11/02/17 19:56 | 1 |

Lab Sample ID: LCS 500-408083/2-A
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408083

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|-------|---|------|----------|
| Antimony | 50.0 | 43.4 | | mg/Kg | | 87 | 80 - 120 |
| Arsenic | 10.0 | 9.01 | | mg/Kg | | 90 | 80 - 120 |
| Barium | 200 | 188 | | mg/Kg | | 94 | 80 - 120 |
| Beryllium | 5.00 | 4.49 | | mg/Kg | | 90 | 80 - 120 |
| Cadmium | 5.00 | 4.65 | | mg/Kg | | 93 | 80 - 120 |
| Chromium | 20.0 | 19.3 | | mg/Kg | | 96 | 80 - 120 |
| Cobalt | 50.0 | 47.0 | | mg/Kg | | 94 | 80 - 120 |
| Copper | 25.0 | 23.6 | | mg/Kg | | 95 | 80 - 120 |
| Iron | 100 | 100 | | mg/Kg | | 100 | 80 - 120 |
| Lead | 10.0 | 9.13 | | mg/Kg | | 91 | 80 - 120 |
| Manganese | 50.0 | 45.2 | | mg/Kg | | 90 | 80 - 120 |
| Nickel | 50.0 | 46.1 | | mg/Kg | | 92 | 80 - 120 |
| Selenium | 10.0 | 8.35 | | mg/Kg | | 83 | 80 - 120 |
| Silver | 5.00 | 4.45 | | mg/Kg | | 89 | 80 - 120 |
| Thallium | 10.0 | 8.46 | | mg/Kg | | 85 | 80 - 120 |
| Vanadium | 50.0 | 47.1 | | mg/Kg | | 94 | 80 - 120 |
| Zinc | 50.0 | 45.6 | | mg/Kg | | 91 | 80 - 120 |

Lab Sample ID: 500-136575-1 MS
Matrix: Solid
Analysis Batch: 408311

Client Sample ID: 3160-16-4 (0-4')
Prep Type: Total/NA
Prep Batch: 408083

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|-------|---|-------|----------|
| Antimony | 0.46 | J F2 F1 | 28.1 | 5.74 | F1 | mg/Kg | ☼ | 19 | 75 - 125 |
| Arsenic | 6.1 | F2 F1 | 5.62 | 10.3 | F1 | mg/Kg | ☼ | 74 | 75 - 125 |
| Barium | 100 | | 112 | 197 | | mg/Kg | ☼ | 85 | 75 - 125 |
| Beryllium | 0.48 | | 2.81 | 2.71 | | mg/Kg | ☼ | 79 | 75 - 125 |
| Cadmium | 0.26 | B | 2.81 | 2.65 | | mg/Kg | ☼ | 85 | 75 - 125 |
| Chromium | 9.5 | F1 | 11.2 | 22.1 | | mg/Kg | ☼ | 112 | 75 - 125 |
| Cobalt | 5.0 | | 28.1 | 33.5 | | mg/Kg | ☼ | 101 | 75 - 125 |
| Copper | 13 | F1 | 14.1 | 25.4 | | mg/Kg | ☼ | 88 | 75 - 125 |
| Iron | 16000 | B | 56.2 | 14700 | 4 | mg/Kg | ☼ | -3072 | 75 - 125 |
| Lead | 30 | | 5.62 | 39.3 | 4 | mg/Kg | ☼ | 163 | 75 - 125 |
| Manganese | 180 | | 28.1 | 282 | 4 | mg/Kg | ☼ | 368 | 75 - 125 |
| Nickel | 9.5 | | 28.1 | 37.9 | | mg/Kg | ☼ | 101 | 75 - 125 |
| Selenium | 0.77 | F1 | 5.62 | 4.81 | F1 | mg/Kg | ☼ | 72 | 75 - 125 |
| Silver | <0.27 | | 2.81 | 2.17 | | mg/Kg | ☼ | 77 | 75 - 125 |
| Thallium | <0.53 | F2 F1 | 5.62 | 4.41 | | mg/Kg | ☼ | 78 | 75 - 125 |
| Vanadium | 17 | | 28.1 | 45.1 | | mg/Kg | ☼ | 101 | 75 - 125 |
| Zinc | 71 | F1 | 28.1 | 103 | | mg/Kg | ☼ | 115 | 75 - 125 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136575-1 MSD

Matrix: Solid

Analysis Batch: 408311

Client Sample ID: 3160-16-4 (0-4')

Prep Type: Total/NA

Prep Batch: 408083

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD | | Unit | D | %Rec | Limits | RPD | |
|-----------|---------------|------------------|-------------|--------|-----------|-------|---|------|----------|-----|-------|
| | | | | Result | Qualifier | | | | | RPD | Limit |
| Antimony | 0.46 | J F2 F1 | 24.6 | 4.10 | F4 F1 | mg/Kg | ☼ | 15 | 75 - 125 | 33 | 20 |
| Arsenic | 6.1 | F2 F1 | 4.92 | 12.6 | F1 F4 | mg/Kg | ☼ | 132 | 75 - 125 | 21 | 20 |
| Barium | 100 | | 98.4 | 180 | | mg/Kg | ☼ | 80 | 75 - 125 | 9 | 20 |
| Beryllium | 0.48 | | 2.46 | 2.48 | | mg/Kg | ☼ | 81 | 75 - 125 | 9 | 20 |
| Cadmium | 0.26 | B | 2.46 | 2.36 | | mg/Kg | ☼ | 85 | 75 - 125 | 12 | 20 |
| Chromium | 9.5 | F1 | 9.84 | 22.0 | F1 | mg/Kg | ☼ | 127 | 75 - 125 | 1 | 20 |
| Cobalt | 5.0 | | 24.6 | 29.8 | | mg/Kg | ☼ | 101 | 75 - 125 | 12 | 20 |
| Copper | 13 | F1 | 12.3 | 29.0 | F1 | mg/Kg | ☼ | 130 | 75 - 125 | 13 | 20 |
| Iron | 16000 | B | 49.2 | 17000 | 4 | mg/Kg | ☼ | 1112 | 75 - 125 | 14 | 20 |
| Lead | 30 | | 4.92 | 41.2 | 4 | mg/Kg | ☼ | 226 | 75 - 125 | 5 | 20 |
| Manganese | 180 | | 24.6 | 283 | 4 | mg/Kg | ☼ | 428 | 75 - 125 | 1 | 20 |
| Nickel | 9.5 | | 24.6 | 36.1 | | mg/Kg | ☼ | 108 | 75 - 125 | 5 | 20 |
| Selenium | 0.77 | F1 | 4.92 | 4.82 | | mg/Kg | ☼ | 82 | 75 - 125 | 0 | 20 |
| Silver | <0.27 | | 2.46 | 1.85 | | mg/Kg | ☼ | 75 | 75 - 125 | 16 | 20 |
| Thallium | <0.53 | F2 F1 | 4.92 | 3.39 | F4 F1 | mg/Kg | ☼ | 69 | 75 - 125 | 26 | 20 |
| Vanadium | 17 | | 24.6 | 44.8 | | mg/Kg | ☼ | 114 | 75 - 125 | 1 | 20 |
| Zinc | 71 | F1 | 24.6 | 110 | F1 | mg/Kg | ☼ | 161 | 75 - 125 | 7 | 20 |

Lab Sample ID: 500-136575-1 DU

Matrix: Solid

Analysis Batch: 408311

Client Sample ID: 3160-16-4 (0-4')

Prep Type: Total/NA

Prep Batch: 408083

| Analyte | Sample Result | Sample Qualifier | DU | | Unit | D | RPD | Limit |
|-----------|---------------|------------------|--------|-----------|-------|---|-----|-------|
| | | | Result | Qualifier | | | | |
| Antimony | 0.46 | J F2 F1 | <1.1 | | mg/Kg | ☼ | NC | 20 |
| Arsenic | 6.1 | F2 F1 | 5.91 | | mg/Kg | ☼ | 3 | 20 |
| Barium | 100 | | 90.2 | | mg/Kg | ☼ | 12 | 20 |
| Beryllium | 0.48 | | 0.471 | | mg/Kg | ☼ | 3 | 20 |
| Cadmium | 0.26 | B | 0.270 | | mg/Kg | ☼ | 5 | 20 |
| Chromium | 9.5 | F1 | 9.95 | | mg/Kg | ☼ | 4 | 20 |
| Cobalt | 5.0 | | 5.86 | | mg/Kg | ☼ | 16 | 20 |
| Copper | 13 | F1 | 13.2 | | mg/Kg | ☼ | 1 | 20 |
| Iron | 16000 | B | 14600 | | mg/Kg | ☼ | 12 | 20 |
| Lead | 30 | | 33.6 | | mg/Kg | ☼ | 11 | 20 |
| Manganese | 180 | | 221 | F3 | mg/Kg | ☼ | 22 | 20 |
| Nickel | 9.5 | | 10.2 | | mg/Kg | ☼ | 7 | 20 |
| Selenium | 0.77 | F1 | 0.569 | F5 | mg/Kg | ☼ | 30 | 20 |
| Silver | <0.27 | | <0.28 | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.53 | F2 F1 | <0.55 | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 17 | | 17.1 | | mg/Kg | ☼ | 2 | 20 |
| Zinc | 71 | F1 | 79.2 | | mg/Kg | ☼ | 11 | 20 |

Lab Sample ID: LCS 500-408404/2-A

Matrix: Solid

Analysis Batch: 408545

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 408404

| Analyte | Spike Added | LCS | | Unit | D | %Rec | Limits |
|-----------|-------------|--------|-----------|------|---|------|----------|
| | | Result | Qualifier | | | | |
| Manganese | 0.500 | 0.477 | | mg/L | | 95 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-408407/2-A
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408407
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Manganese | 0.500 | 0.475 | | mg/L | | 95 | 80 - 120 |

Lab Sample ID: LCS 500-408408/2-A
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408408
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Arsenic | 0.100 | 0.0911 | | mg/L | | 91 | 80 - 120 |
| Barium | 0.500 | 0.518 | | mg/L | | 104 | 80 - 120 |
| Beryllium | 0.0500 | 0.0490 | | mg/L | | 98 | 80 - 120 |
| Cadmium | 0.0500 | 0.0501 | | mg/L | | 100 | 80 - 120 |
| Chromium | 0.200 | 0.203 | | mg/L | | 102 | 80 - 120 |
| Cobalt | 0.500 | 0.495 | | mg/L | | 99 | 80 - 120 |
| Copper | 0.250 | 0.260 | | mg/L | | 104 | 80 - 120 |
| Iron | 1.00 | 1.10 | | mg/L | | 110 | 80 - 120 |
| Lead | 0.100 | 0.0968 | | mg/L | | 97 | 80 - 120 |
| Manganese | 0.500 | 0.495 | | mg/L | | 99 | 80 - 120 |
| Nickel | 0.500 | 0.494 | | mg/L | | 99 | 80 - 120 |
| Selenium | 0.100 | 0.0996 | | mg/L | | 100 | 80 - 120 |
| Silver | 0.0500 | 0.0484 | | mg/L | | 97 | 80 - 120 |
| Vanadium | 0.500 | 0.503 | | mg/L | | 101 | 80 - 120 |
| Zinc | 0.500 | 0.487 | J | mg/L | | 97 | 80 - 120 |

Lab Sample ID: LCS 500-408410/2-A
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408410
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Arsenic | 0.100 | 0.102 | | mg/L | | 102 | 80 - 120 |
| Barium | 0.500 | 0.525 | | mg/L | | 105 | 80 - 120 |
| Beryllium | 0.0500 | 0.0508 | | mg/L | | 102 | 80 - 120 |
| Cadmium | 0.0500 | 0.0509 | | mg/L | | 102 | 80 - 120 |
| Chromium | 0.200 | 0.206 | | mg/L | | 103 | 80 - 120 |
| Cobalt | 0.500 | 0.504 | | mg/L | | 101 | 80 - 120 |
| Copper | 0.250 | 0.262 | | mg/L | | 105 | 80 - 120 |
| Iron | 1.00 | 1.04 | | mg/L | | 104 | 80 - 120 |
| Lead | 0.100 | 0.0993 | | mg/L | | 99 | 80 - 120 |
| Manganese | 0.500 | 0.505 | | mg/L | | 101 | 80 - 120 |
| Nickel | 0.500 | 0.504 | | mg/L | | 101 | 80 - 120 |
| Selenium | 0.100 | 0.0980 | | mg/L | | 98 | 80 - 120 |
| Silver | 0.0500 | 0.0493 | | mg/L | | 99 | 80 - 120 |
| Vanadium | 0.500 | 0.518 | | mg/L | | 104 | 80 - 120 |
| Zinc | 0.500 | 0.492 | J | mg/L | | 98 | 80 - 120 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-408173/1-C
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408408

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 14:57 | 11/05/17 16:15 | 1 |

Lab Sample ID: 500-136575-19 MS
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408408

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Arsenic | <0.050 | | 0.100 | 0.109 | | mg/L | | 109 | 50 - 150 |
| Barium | 0.52 | | 0.500 | 1.05 | | mg/L | | 106 | 50 - 150 |
| Beryllium | <0.0040 | | 0.0500 | 0.0518 | | mg/L | | 104 | 50 - 150 |
| Cadmium | <0.0050 | | 0.0500 | 0.0587 | | mg/L | | 117 | 50 - 150 |
| Chromium | <0.025 | | 0.200 | 0.202 | | mg/L | | 101 | 50 - 150 |
| Cobalt | <0.025 | | 0.500 | 0.511 | | mg/L | | 102 | 50 - 150 |
| Copper | 0.010 | J | 0.250 | 0.300 | | mg/L | | 120 | 50 - 150 |
| Iron | <0.40 | | 1.00 | 1.28 | | mg/L | | 128 | 50 - 150 |
| Lead | <0.0075 | | 0.100 | 0.101 | | mg/L | | 101 | 50 - 150 |
| Manganese | 0.080 | | 0.500 | 0.568 | | mg/L | | 98 | 50 - 150 |
| Nickel | <0.025 | | 0.500 | 0.512 | | mg/L | | 102 | 50 - 150 |
| Selenium | 0.020 | J | 0.100 | 0.127 | | mg/L | | 127 | 50 - 150 |
| Silver | <0.025 | | 0.0500 | 0.0597 | | mg/L | | 119 | 50 - 150 |
| Vanadium | <0.025 | | 0.500 | 0.496 | | mg/L | | 99 | 50 - 150 |
| Zinc | 0.067 | J | 0.500 | 0.612 | | mg/L | | 109 | 50 - 150 |

Lab Sample ID: 500-136575-19 DU
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408408

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|-----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Arsenic | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Barium | 0.52 | | 0.530 | | mg/L | | 2 | 20 |
| Beryllium | <0.0040 | | <0.0040 | | mg/L | | NC | 20 |
| Cadmium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Chromium | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Cobalt | <0.025 | | <0.025 | | mg/L | | NC | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136575-19 DU
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408408

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|-----------|---------|-----------|---------|-----------|------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Copper | 0.010 | J | 0.0103 | J | mg/L | | 4 | 20 |
| Iron | <0.40 | | <0.40 | | mg/L | | NC | 20 |
| Lead | <0.0075 | | <0.0075 | | mg/L | | NC | 20 |
| Manganese | 0.080 | | 0.0813 | | mg/L | | 2 | 20 |
| Nickel | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Selenium | 0.020 | J | <0.050 | | mg/L | | NC | 20 |
| Silver | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Vanadium | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Zinc | 0.067 | J | 0.0695 | J | mg/L | | 4 | 20 |

Lab Sample ID: LB 500-408176/1-D
Matrix: Solid
Analysis Batch: 408541

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408410

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/03/17 15:00 | 11/05/17 14:24 | 1 |

Lab Sample ID: LB 500-408171/1-B
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 408404

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:53 | 11/06/17 01:48 | 1 |

Lab Sample ID: LB 500-408172/1-B
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 408407

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/03/17 14:56 | 11/06/17 00:25 | 1 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-408408/2-A
Matrix: Solid
Analysis Batch: 408763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408408

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.467 | | mg/L | | 93 | 80 - 120 |
| Thallium | 0.100 | 0.0990 | | mg/L | | 99 | 80 - 120 |

Lab Sample ID: LCS 500-408410/2-A
Matrix: Solid
Analysis Batch: 408763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408410

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.477 | | mg/L | | 95 | 80 - 120 |
| Thallium | 0.100 | 0.104 | | mg/L | | 104 | 80 - 120 |

Lab Sample ID: LB 500-408173/1-C
Matrix: Solid
Analysis Batch: 408763

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408408

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 14:57 | 11/06/17 15:59 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 14:57 | 11/06/17 15:59 | 1 |

Lab Sample ID: 500-136575-19 MS
Matrix: Solid
Analysis Batch: 408763

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408408

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Antimony | <0.0060 | | 0.500 | 0.465 | | mg/L | | 93 | 50 - 150 |
| Thallium | <0.0020 | | 0.100 | 0.105 | | mg/L | | 105 | 50 - 150 |

Lab Sample ID: 500-136575-19 DU
Matrix: Solid
Analysis Batch: 408763

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408408

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Antimony | <0.0060 | | <0.0060 | | mg/L | | NC | 20 |
| Thallium | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |

Lab Sample ID: LB 500-408176/1-D
Matrix: Solid
Analysis Batch: 408763

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408410

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/03/17 15:00 | 11/06/17 18:02 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/03/17 15:00 | 11/06/17 18:02 | 1 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-408350/12-A
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408350

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:28 | 1 |

Lab Sample ID: LCS 500-408350/13-A
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408350

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|------|---|------|----------|
| Mercury | 0.00200 | 0.00174 | | mg/L | | 87 | 80 - 120 |

Lab Sample ID: MB 500-408360/12-A
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408360

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 08:47 | 1 |

Lab Sample ID: LCS 500-408360/13-A
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408360

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|------|---|------|----------|
| Mercury | 0.00200 | 0.00195 | | mg/L | | 98 | 80 - 120 |

Lab Sample ID: LB 500-408173/1-B
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408350

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 10:31 | 1 |

Lab Sample ID: 500-136575-19 MS
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408350

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Mercury | <0.00020 | | 0.00100 | 0.00105 | | mg/L | | 105 | 50 - 150 |

Lab Sample ID: 500-136575-19 DU
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: 3160-32-5 (0-3.5')
Prep Type: TCLP
Prep Batch: 408350

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Mercury | <0.00020 | | <0.00020 | | mg/L | | NC | 20 |

Lab Sample ID: LB 500-408176/1-C
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408360

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/03/17 12:20 | 11/06/17 08:49 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Lab Sample ID: 500-136575-20 MS
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: 3160-32-6 (0-3.5')
Prep Type: TCLP
Prep Batch: 408360

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Mercury | <0.00020 | | 0.00100 | 0.00102 | | mg/L | | 102 | 50 - 150 |

Lab Sample ID: 500-136575-20 DU
Matrix: Solid
Analysis Batch: 408624

Client Sample ID: 3160-32-6 (0-3.5')
Prep Type: TCLP
Prep Batch: 408360

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Mercury | <0.00020 | | <0.00020 | | mg/L | | NC | 20 |

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-408223/12-A
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408223

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/02/17 16:10 | 11/03/17 08:00 | 1 |

Lab Sample ID: LCS 500-408223/13-A
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408223

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.172 | | mg/Kg | | 103 | 80 - 120 |

Lab Sample ID: 500-136575-6 MS
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: 3160-23-1 (0-4.5')
Prep Type: Total/NA
Prep Batch: 408223

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Mercury | 0.031 | | 0.0894 | 0.118 | | mg/Kg | ☼ | 97 | 75 - 125 |

Lab Sample ID: 500-136575-6 MSD
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: 3160-23-1 (0-4.5')
Prep Type: Total/NA
Prep Batch: 408223

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Mercury | 0.031 | | 0.0897 | 0.118 | | mg/Kg | ☼ | 97 | 75 - 125 | 0 | 20 |

Lab Sample ID: 500-136575-6 DU
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: 3160-23-1 (0-4.5')
Prep Type: Total/NA
Prep Batch: 408223

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|-------|---|-----|-------|
| Mercury | 0.031 | | 0.0357 | | mg/Kg | ☼ | 14 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: MB 500-408246/12-A
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408246

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/02/17 16:10 | 11/03/17 09:05 | 1 |

Lab Sample ID: LCS 500-408246/13-A
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408246

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.177 | | mg/Kg | | 106 | 80 - 120 |

Lab Sample ID: 500-136575-31 MS
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408246

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Mercury | 0.025 | | 0.0932 | 0.114 | | mg/Kg | ☼ | 95 | 75 - 125 |

Lab Sample ID: 500-136575-31 MSD
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408246

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Mercury | 0.025 | | 0.0928 | 0.112 | | mg/Kg | ☼ | 94 | 75 - 125 | 1 | 20 |

Lab Sample ID: 500-136575-31 DU
Matrix: Solid
Analysis Batch: 408366

Client Sample ID: 3160-50-3 (0-2')
Prep Type: Total/NA
Prep Batch: 408246

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|-------|---|-----|-------|
| Mercury | 0.025 | | 0.0227 | | mg/Kg | ☼ | 11 | 20 |

Method: 9045D - pH

Lab Sample ID: 500-136575-6 DU
Matrix: Solid
Analysis Batch: 408326

Client Sample ID: 3160-23-1 (0-4.5')
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| pH | 6.2 | | 6.24 | | SU | | 0.3 | |

Lab Sample ID: 500-136575-25 DU
Matrix: Solid
Analysis Batch: 408326

Client Sample ID: 3160-45-3 (0-5')
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| pH | 8.1 | | 8.09 | | SU | | 0.4 | |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-4 (0-4')

Date Collected: 10/31/17 08:20

Date Received: 11/01/17 09:05

Lab Sample ID: 500-136575-1

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:23 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:07 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:33 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-16-4 (0-4')

Date Collected: 10/31/17 08:20

Date Received: 11/01/17 09:05

Lab Sample ID: 500-136575-1

Matrix: Solid

Percent Solids: 86.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 12:17 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408988 | 11/08/17 13:13 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:03 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:05 | EEN | TAL CHI |

Client Sample ID: 3160-16-3 (0-4')

Date Collected: 10/31/17 08:30

Date Received: 11/01/17 09:05

Lab Sample ID: 500-136575-2

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:27 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:11 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:34 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-3 (0-4')

Lab Sample ID: 500-136575-2

Date Collected: 10/31/17 08:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 13:52 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 16:29 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:23 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:07 | EEN | TAL CHI |

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

Date Collected: 10/31/17 08:07

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:31 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:15 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:36 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-16-2 (0-4')

Lab Sample ID: 500-136575-3

Date Collected: 10/31/17 08:07

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 87.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 14:17 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 16:54 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:27 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:09 | EEN | TAL CHI |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

Date Collected: 10/31/17 08:50

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:35 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:19 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:37 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-16-1 (0-4')

Lab Sample ID: 500-136575-4

Date Collected: 10/31/17 08:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 86.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 14:43 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 17:20 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 5 | 408472 | 11/03/17 13:52 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:31 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:11 | EEN | TAL CHI |

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

Date Collected: 10/31/17 09:00

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:47 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:23 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:39 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-16-5 (0-4')

Lab Sample ID: 500-136575-5

Date Collected: 10/31/17 09:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 83.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 15:08 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408988 | 11/08/17 13:41 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:44 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:14 | EEN | TAL CHI |

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:51 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:27 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:40 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-23-1 (0-4.5')

Lab Sample ID: 500-136575-6

Date Collected: 10/31/17 09:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 89.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 15:33 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 17:45 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8081B | | 1 | 409183 | 11/09/17 11:39 | PJG | TAL CHI |
| Total/NA | Prep | 8151A | | | 409129 | 11/08/17 22:28 | NRJ | TAL CHI |
| Total/NA | Analysis | 8151A | | 10 | 409021 | 11/10/17 08:21 | JBj | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:48 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:16 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:55 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:31 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 10:42 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-23-2 (0-4.5')

Lab Sample ID: 500-136575-7

Date Collected: 10/31/17 09:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 15:59 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408988 | 11/08/17 14:09 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8081B | | 5 | 409066 | 11/08/17 21:54 | PJG | TAL CHI |
| Total/NA | Prep | 8151A | | | 409129 | 11/08/17 22:28 | NRJ | TAL CHI |
| Total/NA | Analysis | 8151A | | 10 | 409021 | 11/10/17 08:45 | JBj | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:52 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:29 | EEN | TAL CHI |

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408171 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408404 | 11/03/17 14:53 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 02:24 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 16:59 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:44 | FXG | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:16 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-25-1 (0-4')

Lab Sample ID: 500-136575-8

Date Collected: 10/31/17 09:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 16:24 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 18:10 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 20:56 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:31 | EEN | TAL CHI |

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:03 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:52 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:17 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-25-2 (0-4')

Lab Sample ID: 500-136575-9

Date Collected: 10/31/17 10:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 16:49 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 18:35 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:00 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:34 | EEN | TAL CHI |

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

Date Collected: 10/31/17 10:10

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:07 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 16:56 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:19 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-26-2 (0-4')

Lab Sample ID: 500-136575-10

Date Collected: 10/31/17 10:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 17:14 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 19:00 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:03 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:36 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

Date Collected: 10/31/17 10:20

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408171 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408404 | 11/03/17 14:53 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 02:44 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:11 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:00 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:20 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-26-1 (0-4')

Lab Sample ID: 500-136575-11

Date Collected: 10/31/17 10:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 85.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 17:40 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 19:25 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:07 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:38 | EEN | TAL CHI |

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408171 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408404 | 11/03/17 14:53 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 02:48 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:15 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:04 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:22 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-28-1 (0-5')

Lab Sample ID: 500-136575-12

Date Collected: 10/31/17 10:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 12:34 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 19:50 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:11 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:40 | EEN | TAL CHI |

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

Date Collected: 10/31/17 10:40

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408171 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408404 | 11/03/17 14:53 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 02:52 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:19 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:08 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:23 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-28-2 (0-5')

Lab Sample ID: 500-136575-13

Date Collected: 10/31/17 10:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 18:30 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 21:06 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:15 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:43 | EEN | TAL CHI |

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

Date Collected: 10/31/17 10:50

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408171 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408404 | 11/03/17 14:53 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 02:56 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:23 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:12 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:27 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-28-3 (0-5')

Lab Sample ID: 500-136575-14

Date Collected: 10/31/17 10:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 80.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 18:55 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408988 | 11/08/17 14:37 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | DL | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | DL | 2 | 409184 | 11/09/17 13:20 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:19 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:45 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

Date Collected: 10/31/17 11:00

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:35 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:17 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:29 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-32-1 (0-3.5')

Lab Sample ID: 500-136575-15

Date Collected: 10/31/17 11:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 19:21 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408852 | 11/07/17 16:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408968 | 11/08/17 21:31 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 18:49 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:32 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:52 | EEN | TAL CHI |

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:39 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:21 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:30 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-32-2 (0-3.5')

Lab Sample ID: 500-136575-16

Date Collected: 10/31/17 11:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 79.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 19:46 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 21:15 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 19:04 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 5 | 408472 | 11/03/17 13:56 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:36 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:54 | EEN | TAL CHI |

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:44 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:37 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:32 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-3 (0-3.5')

Lab Sample ID: 500-136575-17

Date Collected: 10/31/17 11:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 20:11 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 21:42 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 19:19 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:40 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:56 | EEN | TAL CHI |

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

Date Collected: 10/31/17 11:30

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:48 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:41 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:33 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-32-4 (0-3.5')

Lab Sample ID: 500-136575-18

Date Collected: 10/31/17 11:30

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 20:36 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 22:08 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 19:35 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:44 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 08:58 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

Date Collected: 10/31/17 11:40

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 17:52 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408408 | 11/03/17 14:57 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 17:45 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408173 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408350 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 11:35 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-32-5 (0-3.5')

Lab Sample ID: 500-136575-19

Date Collected: 10/31/17 11:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 21:01 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 22:35 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 19:50 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:48 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:01 | EEN | TAL CHI |

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408172 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408407 | 11/03/17 14:56 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 00:33 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 14:44 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:10 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 08:56 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 407988 | 11/01/17 14:42 | LWN | TAL CHI |

Client Sample ID: 3160-32-6 (0-3.5')

Lab Sample ID: 500-136575-20

Date Collected: 10/31/17 12:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408095 | 11/02/17 21:26 | DJD | TAL CHI |
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 12:59 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 23:01 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 20:05 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408083 | 11/02/17 07:49 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 21:52 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408223 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:03 | EEN | TAL CHI |

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

Date Collected: 10/31/17 12:50

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 14:48 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:14 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:03 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-1 (0-5')

Lab Sample ID: 500-136575-21

Date Collected: 10/31/17 12:50

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 13:25 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 23:28 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 20:21 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 17:57 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:10 | EEN | TAL CHI |

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

Date Collected: 10/31/17 13:00

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:00 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:26 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:04 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-45-1 (5-6')

Lab Sample ID: 500-136575-22

Date Collected: 10/31/17 13:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 13:50 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/07/17 23:54 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 20:36 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:01 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:12 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

Date Collected: 10/31/17 13:10

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:04 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:30 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:06 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-45-2 (0-5')

Lab Sample ID: 500-136575-23

Date Collected: 10/31/17 13:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 14:15 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 00:21 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 20:51 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:05 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:19 | EEN | TAL CHI |

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

Date Collected: 10/31/17 13:15

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:08 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:34 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:07 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-2 (5-6')

Lab Sample ID: 500-136575-24

Date Collected: 10/31/17 13:15

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 14:40 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 00:47 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408853 | 11/07/17 16:20 | NRJ | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409369 | 11/10/17 21:07 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:18 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:21 | EEN | TAL CHI |

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:12 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:39 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:09 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 15:05 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 01:14 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 11:41 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 5 | 409230 | 11/09/17 11:51 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:22 | PJ1 | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-3 (0-5')

Lab Sample ID: 500-136575-25

Date Collected: 10/31/17 13:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 88.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:23 | EEN | TAL CHI |

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

Date Collected: 10/31/17 13:25

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:16 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:43 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:10 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-45-3 (5-6')

Lab Sample ID: 500-136575-26

Date Collected: 10/31/17 13:25

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 15:30 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 01:41 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 11:56 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:25 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:26 | EEN | TAL CHI |

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:20 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:47 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:12 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-45-4 (0-5')

Lab Sample ID: 500-136575-27

Date Collected: 10/31/17 13:35

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 15:55 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 02:07 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 12:12 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:29 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:28 | EEN | TAL CHI |

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

Date Collected: 10/31/17 13:40

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:24 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:51 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:13 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-45-4 (5-6')

Lab Sample ID: 500-136575-28

Date Collected: 10/31/17 13:40

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 84.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 16:21 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 02:34 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 12:27 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:33 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:30 | EEN | TAL CHI |

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

Date Collected: 10/31/17 14:00

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408172 | 11/02/17 12:37 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408407 | 11/03/17 14:56 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 408545 | 11/06/17 01:17 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:28 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:55 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:15 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-50-1 (0-2')

Lab Sample ID: 500-136575-29

Date Collected: 10/31/17 14:00

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 82.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 16:45 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 03:00 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:37 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:40 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

Date Collected: 10/31/17 14:10

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:32 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 18:59 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:16 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

Client Sample ID: 3160-50-2 (0-2')

Lab Sample ID: 500-136575-30

Date Collected: 10/31/17 14:10

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 81.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 17:11 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 03:27 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:41 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:42 | EEN | TAL CHI |

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

Date Collected: 10/31/17 14:20

Matrix: Solid

Date Received: 11/01/17 09:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408541 | 11/05/17 15:36 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408410 | 11/03/17 15:00 | BDE | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408763 | 11/06/17 19:03 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408176 | 11/02/17 12:37 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408360 | 11/03/17 12:20 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408624 | 11/06/17 09:21 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 408326 | 11/03/17 08:57 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408166 | 11/02/17 12:28 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Client Sample ID: 3160-50-3 (0-2')

Lab Sample ID: 500-136575-31

Date Collected: 10/31/17 14:20

Matrix: Solid

Date Received: 11/01/17 09:05

Percent Solids: 77.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408142 | 11/01/17 18:01 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408295 | 11/03/17 17:36 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408732 | 11/07/17 07:18 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 408867 | 11/08/17 03:54 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408066 | 11/02/17 07:14 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408311 | 11/02/17 18:45 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408246 | 11/02/17 16:10 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408366 | 11/03/17 09:45 | EEN | TAL CHI |

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136575-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| Illinois | NELAP | 5 | 100201 | 04-30-18 |

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|----------------------------|
| 6020A | 3010A | Solid | Antimony |
| 6020A | 3010A | Solid | Thallium |
| 8260B | 5035 | Solid | 1,3-Dichloropropene, Total |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: TERRY DIXON
Company: AMEL-FW WOOD
Address: 4232 BRANDY WINE
Address: SUIT 2A
Phone: PEORIA, IL 61614
Fax: 309-692-4422
E-Mail:

Bill To (optional)
Contact: JANE
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference# 500-136575 COC

Chain of Custody Record

Lab Job #: 500-136575
Chain of Custody Number:
Page 1 of 4
Temperature °C of Cooler: (2.4)/(1.9)/(3.8)

| Client | | Client Project # | | Preservative | | Parameter | | | | | | | | | | Preservative Key | |
|------------------------|--------|--------------------|----------|--------------|-----------------|-----------|------|-------|-----|--------------|-------------|-------------|----|-----------|-------------|---|---------------|
| AMEL-FW WOOD | | | | | | | | | | | | | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | |
| Project Name | | Lab Project # | | | | | | | | | | | | | | | |
| IDOT BENTON WO-28 | | 50013898 | | | | | | | | | | | | | | | |
| Project Location/State | | Lab PM | | | | | | | | | | | | | | | |
| IL Rt 37 Benton, IL | | DICK WRIGHT | | | | | | | | | | | | | | | |
| Sampler | | | | | | | | | | | | | | | | | |
| Tom MURPHY | | | | | | | | | | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | Sampling | | # of Containers | Matrix | NOCS | SVOCS | PCB | TOTAL METALS | TCLP METALS | SPLP METALS | PH | 90 SOLIDS | PEST / HERB | | Comments |
| | | | Date | Time | | | | | | | | | | | | | |
| 1 | | 3160-16-4 (0-4') | 10/31 | 0820 | 6 | S | X | X | | X | X | X | X | | | | PLEASE HOLD |
| 2 | | 3160-16-3 (0-4') | 10/31 | 0830 | 6 | S | X | X | | X | X | X | X | | | | SPLP BASED ON |
| 3 | | 3160-16-2 (0-4') | 10/31 | 0840 | 6 | S | X | X | | X | X | X | X | | | | TCLP RESULTS |
| 4 | | 3160-16-1 (0-4') | 10/31 | 0850 | 6 | S | X | X | | X | X | X | X | | | | |
| 5 | | 3160-16-5 (0-4') | 10/31 | 0900 | 6 | S | X | X | | X | X | X | X | | | | PLEASE SEE |
| 6 | | 3160-23-1 (0-4.5') | 10/31 | 0920 | 6 | S | X | X | | X | X | X | X | X | X | | (18) METALS |
| 7 | | 3160-23-2 (0-4.5') | 10/31 | 0930 | 6 | S | X | X | | X | X | X | X | X | X | | LIST EMAIL |
| 8 | | 3160-25-1 (0-4') | 10/31 | 0950 | 6 | S | X | X | | X | X | X | X | | | | FROM TERRY |
| 9 | | 3160-25-2 (0-4') | 10/31 | 1000 | 6 | S | X | X | | X | X | X | X | | | | DIXON, |
| 10 | | 3160-26-2 (0-4') | 10/31 | 1010 | 6 | S | X | X | | X | X | X | X | | | | |

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days X Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|-------------------|---------------------|-----------------|-------------|--------------------|-----------|-----------------|-------------|
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| <u>Tom Murphy</u> | <u>AMEL-FW WOOD</u> | <u>10/31/17</u> | <u>1700</u> | <u>[Signature]</u> | <u>TA</u> | <u>11/01/17</u> | <u>0905</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| | | | | | | | |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| | | | | | | | |

Lab Courier
Shipped
Hand Delivered

Matrix Key
WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: TERRY DIXON
Company: AMELFR WOOD
Address: 4232 BRANDYVINE
Address: Suite A
Phone: PEORIA, IL 61614
Fax: 309 692-4422
E-Mail:

Bill To (optional)
Contact: JANE
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-136575
Chain of Custody Number:
Page 2 of 4
Temperature °C of Cooler:

| Client | | Client Project # | | Preservative | | Parameter | | | | | | | | | | Preservative Key | |
|--------------|--|------------------------|--|---------------|------|-----------------|---|--------------|---|------|--|-------|---|-----|---|---|-----------|
| Amelfr wood | | 3160150049 | | | | | | | | | | | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | |
| Project Name | | Project Location/State | | Lab Project # | | Sampler | | Lab PM | | | | | | | | | |
| IDOT WO-28 | | Benton, IL | | 50013898 | | Tom McVally | | DICK WRIBHIT | | VOCs | | SVOCs | | PCB | | TOTAL METALS | |
| MS/MSD | | Sample ID | | Sampling | | # of Containers | | Matrix | | | | | | | | | |
| | | | | Date Time | | | | | | | | | | | | | |
| 11 | | 3160-26-1 (0-4') | | 10/31 | 1020 | 6 | 5 | X | X | | | X | X | X | X | | SEE pg. 1 |
| 12 | | 3160-28-1 (0-5') | | 10/31 | 1030 | 6 | 5 | X | X | | | X | X | X | X | | NOTES |
| 13 | | 3160-28-2 (0-5') | | 10/31 | 1040 | 6 | 5 | X | X | | | X | X | X | X | | |
| 14 | | 3160-28-3 (0-5') | | 10/31 | 1050 | 6 | 5 | X | X | | | X | X | X | X | | |
| 15 | | 3160-32-1 (0-3.5') | | 10/31 | 1100 | 6 | 5 | X | X | X | | X | X | X | X | | |
| 16 | | 3160-32-2 (0-3.5') | | 10/31 | 1110 | 6 | 5 | X | X | X | | X | X | X | X | | |
| 17 | | 3160-32-3 (0-3.5') | | 10/31 | 1120 | 6 | 5 | X | X | X | | X | X | X | X | | |
| 18 | | 3160-32-4 (0-3.5') | | 10/31 | 1130 | 6 | 5 | X | X | X | | X | X | X | X | | |
| 19 | | 3160-32-5 (0-3.5') | | 10/31 | 1140 | 6 | 5 | X | X | X | | X | X | X | X | | |
| 20 | | 3160-32-6 (0-3.5') | | 10/31 | 1240 | 6 | 5 | X | X | X | | X | X | X | X | | |

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days Routine Other
 Requested Due Date
 Sample Disposal: Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | |
|--|---|----------------|
| Relinquished By <u>[Signature]</u> Company: <u>AMELFR WOOD</u> Date: <u>10/31/17</u> Time: <u>1700</u> | Received By <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/01/17</u> Time: <u>0905</u> | Lab Courier |
| Relinquished By | Received By | Shipped |
| Relinquished By | Received By | Hand Delivered |

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments
 Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: TERRY DIXON
 Company: AMELFW WOOD
 Address: 4232 BRANDYWINE
 Address: SUITE A
 Phone: PEORIA, IL 61614
 Fax: 309-692-4422
 E-Mail:

Bill To (optional)
 Contact: SAME
 Company:
 Address:
 Address:
 Phone:
 Fax:
 PO#/Reference#

Chain of Custody Record

Lab Job #: 500-136575
 Chain of Custody Number:
 Page 3 of 4
 Temperature °C of Cooler:

| Client | | Client Project # | | Preservative | | Parameter | | | | | | | | | | Preservative Key | | | | | | |
|------------------------|-------------------------|---------------------|--------------|--------------|----------|-------------|----------|-----------------|----------|------------|----------|---------------------|----------|--------------------|----------|---|----------|-----------|----------|------------------|----------|------------------|
| <u>AMELFW WOOD</u> | | <u>3160150049</u> | | | | | | | | | | | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | | | | | | |
| Project Name | | Lab Project # | | Sampling | | Matrix | | | | | | | | | | Comments | | | | | | |
| <u>ID.04 WO-28</u> | | <u>50013898</u> | | Date Time | | <u>NOCS</u> | | <u>SVOC</u> | | <u>PCB</u> | | <u>TOTAL METALS</u> | | <u>TELP METALS</u> | | <u>SPLP METALS</u> | | <u>PH</u> | | <u>9P SOLIDS</u> | | |
| Project Location/State | | Lab Project # | | Date | | Time | | # of Containers | | Matrix | | | | | | | | | | | | |
| <u>Benton, IL</u> | | <u>50013898</u> | | | | | | | | | | | | | | | | | | | | |
| Sampler | | Lab PM | | Date | | Time | | # of Containers | | Matrix | | | | | | | | | | | | |
| <u>Tom McNally</u> | | <u>DICK WRIGLEY</u> | | | | | | | | | | | | | | | | | | | | |
| <u>21</u> | <u>3160-45-1 (0-5')</u> | <u>10/31</u> | <u>12:50</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>SEE pg. 1</u> |
| <u>22</u> | <u>3160-45-1 (5-6')</u> | <u>10/31</u> | <u>13:00</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>NOTES</u> |
| <u>23</u> | <u>3160-45-2 (0-5')</u> | <u>10/31</u> | <u>13:10</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>24</u> | <u>3160-45-2 (5-6')</u> | <u>10/31</u> | <u>13:15</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>25</u> | <u>3160-45-3 (0-5')</u> | <u>10/31</u> | <u>13:20</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>26</u> | <u>3160-45-3 (5-6')</u> | <u>10/31</u> | <u>13:25</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>27</u> | <u>3160-45-4 (0-5')</u> | <u>10/31</u> | <u>13:35</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>28</u> | <u>3160-45-4 (5-6')</u> | <u>10/31</u> | <u>13:40</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>29</u> | <u>3160-50-1 (0-2')</u> | <u>10/31</u> | <u>14:00</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |
| <u>30</u> | <u>3160-50-2 (0-2')</u> | | <u>14:10</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | |

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other ROUTINE

Requested Due Date

Sample Disposal

Return to Client

Disposal by Lab

Archive for _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|---------------------------------------|-------------------------------|-------------------------|----------------------|-----------------------------------|----------------------|-------------------------|----------------------|
| Relinquished By <u>[Signature]</u> | Company <u>AMELFW WOOD</u> | Date <u>10/31/17</u> | Time <u>17:00</u> | Received By <u>[Signature]</u> | Company <u>TA</u> | Date <u>11/01/17</u> | Time <u>09:05</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |

| | |
|----------------|--|
| Lab Courier | |
| Shipped | |
| Hand Delivered | |

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: TERRY DIXON
 Company: Amec-fw wood
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: SAME
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-136575
 Chain of Custody Number: _____
 Page 4 of 4
 Temperature °C of Cooler: _____

| Client | | Client Project # | | Preservative | | Parameter | | | | | | | | | | Preservative Key | |
|---------------------|--------|-------------------------|--------------|-----------------|-----------------|--------------------|----------|--------------------|-----|--------------|-------------|-------------|----------|----------|-------------------|---|--|
| <u>Amec-fw wood</u> | | <u>3160150049</u> | | | | | | | | | | | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | |
| Project Name | | Project Location/State | | Lab Project # | | Sampler | | Lab PM | | | | | | | | | |
| <u>FOOT WO-28</u> | | <u>Benton, IL</u> | | <u>50013898</u> | | <u>Tan McNALLY</u> | | <u>DICK WRIGHT</u> | | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | Sampling | | # of Containers | Matrix | NOCS | SVOC | PCB | TOTAL METALS | TELP METALS | SPLP METALS | PH | % SOLIDS | Comments | | |
| | | | Date | Time | | | | | | | | | | | | | |
| <u>31</u> | | <u>3160-50-3 (0-2')</u> | <u>10/31</u> | <u>1420</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | <u>*SEE PG. 1</u> | | |
| | | | | | | | | | | | | | | | <u>NOTES</u> | | |
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Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ROUTINE Other _____
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | | |
|---------------------------------------|--------------------------------|-------------------------|---------------------|-----------------------------------|----------------------|-------------------------|---------------------|----------------|
| Relinquished By <u>[Signature]</u> | Company <u>Amec-fw wood</u> | Date <u>10/31/17</u> | Time <u>1700</u> | Received By <u>[Signature]</u> | Company <u>TA</u> | Date <u>11/01/17</u> | Time <u>0905</u> | Lab Courier |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time | Shipped |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time | Hand Delivered |

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-136575-1

Login Number: 136575

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

| Question | Answer | Comment |
|--|--------|------------------|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | (2.4)(1.9)(3.8)c |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | True | |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-136651-1
Client Project/Site: IDOT - Benton - WO 028

For:
AMEC Foster Wheeler E & I, Inc
4232 Brandywine Drive
Suite A
Peoria, Illinois 61614

Attn: Mr. Terry Dixon



Authorized for release by:
11/14/2017 3:44:29 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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- 2
- 3
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Case Narrative

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Job ID: 500-136651-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-136651-1

Receipt

The samples were received on 11/2/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9° C and 4.5° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: The following samples contained one base surrogate outside acceptance limits: (LCS 500-409105/2-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-409105 and analytical batch 500-409157 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8081B: The following samples was diluted due to the nature of the sample matrix: 3160-56-1 (0-1.5') (500-136651-3) and 3160-56-2 (0-1.5') (500-136651-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: 3160-55-1 (0-3) (500-136651-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]pyrene | 0.036 | J | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.037 | J | 0.040 | 0.0087 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.035 | J | 0.040 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.013 | J | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 8.2 | F1 | 2.7 | 0.92 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Barium | 100 | F1 F2 | 2.7 | 0.31 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Beryllium | 1.0 | J | 1.1 | 0.25 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Cadmium | 0.14 | J | 0.54 | 0.097 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.54 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.4 | | 0.27 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 11 | F1 | 0.54 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 25000 | | 54 | 28 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Lead | 14 | F2 F1 | 0.27 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 600 | F2 | 2.7 | 0.39 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Nickel | 19 | | 0.54 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 28 | | 0.27 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 54 | F1 | 1.1 | 0.47 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.51 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.025 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.42 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.12 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.023 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.048 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.019 | J | 0.021 | 0.0069 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.2 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.024 | | 0.017 | 0.0076 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0075 | J | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.018 | J | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.013 | J | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.0080 | J | 0.077 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.014 | J | 0.038 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.015 | J | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 10 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 92 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.56 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 22 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.1 | | 0.28 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 17 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 23000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 410 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.1 | | 0.55 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 43 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 58 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.48 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3) (Continued)

Lab Sample ID: 500-136651-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.42 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.021 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.049 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.038 | | 0.020 | 0.0067 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.0084 | J | 0.036 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.030 | J | 0.036 | 0.0048 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.058 | | 0.036 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.071 | | 0.036 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.047 | | 0.036 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.014 | J | 0.036 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.040 | | 0.036 | 0.0098 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.059 | J | 0.18 | 0.042 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.049 | | 0.036 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.042 | | 0.036 | 0.0093 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.040 | J | 0.073 | 0.0066 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.023 | J | 0.036 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.093 | | 0.036 | 0.0050 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.051 | | 0.036 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.22 | J | 1.1 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 6.3 | | 0.54 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 95 | | 0.54 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.54 | | 0.22 | 0.050 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.21 | B | 0.11 | 0.019 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.54 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.8 | | 0.27 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.54 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 14000 | | 11 | 5.6 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 210 | | 0.27 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 720 | | 0.54 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.54 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.42 | J | 0.54 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Silver | 0.11 | J | 0.27 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 22 | | 0.27 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 67 | | 1.1 | 0.47 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.0 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0025 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.016 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.53 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.053 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.010 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.029 | | 0.018 | 0.0060 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.030 | | 0.019 | 0.0084 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.019 | J | 0.039 | 0.0066 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.063 | | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.072 | | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.092 | | 0.039 | 0.0086 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.026 | J | 0.039 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.029 | J | 0.039 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.083 | | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.049 | J | 0.20 | 0.046 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.090 | | 0.039 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.018 | J | 0.039 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.11 | | 0.080 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.071 | | 0.039 | 0.0061 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.16 | | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.12 | | 0.039 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 9.2 | | 0.51 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.51 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.60 | | 0.20 | 0.047 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.44 | B | 0.10 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 35 | | 0.51 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 10 | | 0.25 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 19 | | 0.51 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 10 | 5.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 270 | | 0.25 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 980 | | 0.51 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 13 | | 0.51 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.0 | | 0.51 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Silver | 0.15 | J | 0.25 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 26 | | 0.25 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 100 | | 1.0 | 0.44 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.76 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0029 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.017 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.27 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.042 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.093 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.041 | | 0.020 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acenaphthene | 0.035 | J | 0.041 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Acenaphthylene | 0.0088 | J | 0.041 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Anthracene | 0.13 | | 0.041 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 1.1 | | 0.041 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.85 | | 0.041 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 1.3 | | 0.041 | 0.0090 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.30 | | 0.041 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.48 | | 0.041 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-1 (0-1.5') (Continued)

Lab Sample ID: 500-136651-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Carbazole | 0.15 | J | 0.21 | 0.10 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 1.4 | | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.17 | | 0.041 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.061 | J | 0.21 | 0.049 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 1.5 | | 0.041 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluorene | 0.026 | J | 0.041 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.33 | | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.11 | | 0.084 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.052 | | 0.041 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.84 | | 0.041 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 1.4 | | 0.041 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| PCB-1260 | 0.020 | J | 0.021 | 0.010 | mg/Kg | 1 | ☼ | 8082A | Total/NA |
| Antimony | 0.24 | J | 1.2 | 0.24 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 5.8 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 67 | | 0.61 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.45 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.37 | B | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.3 | | 0.30 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 18 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 12000 | | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 160 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 270 | | 0.61 | 0.088 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 21 | | 0.30 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 73 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.76 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0028 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.34 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Lead | 0.022 | | 0.0075 | 0.0075 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.097 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.072 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Lead | 0.14 | | 0.0075 | 0.0075 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.041 | | 0.021 | 0.0069 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.1 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.0079 | J | 0.040 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.021 | J | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.029 | J | 0.040 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.030 | J | 0.040 | 0.0086 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.025 | J | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.026 | J | 0.040 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.021 | J | 0.080 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0082 | J | 0.040 | 0.0061 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.044 | | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.032 | J | 0.040 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-2 (0-1.5') (Continued)

Lab Sample ID: 500-136651-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| PCB-1260 | 0.021 | | 0.021 | 0.010 | mg/Kg | 1 | ☼ | 8082A | Total/NA |
| Arsenic | 4.2 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 59 | | 0.61 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.43 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 11 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 3.7 | | 0.31 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.3 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 9200 | | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 17 | | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 390 | | 0.61 | 0.088 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 6.2 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.60 | J | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 22 | | 0.31 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 31 | | 1.2 | 0.54 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.46 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0021 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.023 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.82 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.093 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.11 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.074 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.1 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.034 | J | 0.038 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.055 | | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.054 | | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.069 | | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.023 | J | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.019 | J | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.064 | | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.047 | J | 0.19 | 0.045 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.077 | | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.018 | J | 0.038 | 0.0099 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.087 | | 0.077 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.034 | J | 0.038 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.20 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.085 | | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.0 | | 0.57 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 110 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.65 | | 0.23 | 0.054 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.30 | B | 0.11 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.1 | | 0.29 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 34 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 13000 | | 11 | 6.0 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 110 | | 0.29 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 300 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-3 (0-1.5') (Continued)

Lab Sample ID: 500-136651-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Nickel | 18 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.90 | | 0.57 | 0.34 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 19 | | 0.29 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 91 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 1.4 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0035 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.013 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.41 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.047 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.093 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.041 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.2 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.013 | J | 0.040 | 0.0068 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.030 | J | 0.040 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.031 | J | 0.040 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.030 | J | 0.040 | 0.0088 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.031 | J | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.034 | J | 0.040 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.064 | J | 0.082 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.030 | J | 0.040 | 0.0063 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.098 | | 0.040 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.041 | | 0.040 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.4 | | 0.54 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 85 | | 0.54 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.52 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.54 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.5 | | 0.27 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.54 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 14000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 22 | | 0.27 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 640 | | 0.54 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 7.1 | | 0.54 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.90 | | 0.54 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 29 | | 0.27 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 32 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.38 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.60 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.14 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.075 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.021 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-9 (0-1.5') (Continued)

Lab Sample ID: 500-136651-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.0099 | J | 0.041 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.022 | J | 0.041 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.012 | J | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.014 | J | 0.041 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.016 | J | 0.083 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.023 | J | 0.041 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.015 | J | 0.041 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 5.0 | | 0.62 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 86 | | 0.62 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.49 | | 0.25 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.038 | J B | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.62 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.3 | | 0.31 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 8.8 | | 0.62 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 12000 | | 12 | 6.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 22 | | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 300 | | 0.62 | 0.090 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.62 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.96 | | 0.62 | 0.37 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 23 | | 0.31 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 38 | | 1.2 | 0.55 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.56 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.58 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.035 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.049 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.021 | | 0.021 | 0.0070 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.011 | J | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.022 | J | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.018 | J | 0.038 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.012 | J | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.0085 | J | 0.077 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.017 | J | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.013 | J | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 9.9 | | 0.60 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 92 | | 0.60 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.59 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.60 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.7 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 8.0 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 12 | 6.2 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 25 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 670 | | 0.60 | 0.087 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.0 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.4 | | 0.60 | 0.35 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-8 (0-1.5') (Continued)

Lab Sample ID: 500-136651-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Vanadium | 37 | | 0.30 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 32 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.42 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.013 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.21 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.016 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.056 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.053 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.019 | J | 0.020 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.2 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.015 | J | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.023 | J | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.017 | J | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.016 | J | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.018 | J | 0.038 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.012 | J | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.036 | J | 0.038 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.024 | J | 0.038 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.0 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 100 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.61 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.035 | J B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.8 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.9 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 32 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 490 | | 0.56 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.99 | | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 28 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 48 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.71 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.048 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.013 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.074 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.035 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.022 | J | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.029 | J | 0.039 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.031 | J | 0.039 | 0.0085 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-6 (0-1.5') (Continued)

Lab Sample ID: 500-136651-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Chrysene | 0.024 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.031 | J | 0.039 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.026 | J | 0.080 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0075 | J | 0.039 | 0.0061 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.054 | | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.031 | J | 0.039 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.2 | | 0.59 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.59 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.47 | | 0.24 | 0.055 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.048 | J B | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.59 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.9 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.8 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 12 | 6.2 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 31 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 720 | | 0.59 | 0.086 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.4 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.1 | | 0.59 | 0.35 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 27 | | 0.30 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 40 | | 1.2 | 0.52 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.64 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.39 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.037 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.071 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.20 | | 0.020 | 0.0067 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.0075 | J | 0.042 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.025 | J | 0.042 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.035 | J | 0.042 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.035 | J | 0.042 | 0.0091 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.014 | J | 0.042 | 0.014 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.013 | J | 0.042 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.028 | J | 0.042 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.048 | | 0.042 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.012 | J | 0.042 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.018 | J | 0.085 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0070 | J | 0.042 | 0.0065 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.052 | | 0.042 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.039 | J | 0.042 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 5.4 | | 0.52 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 89 | | 0.52 | 0.059 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.44 | | 0.21 | 0.048 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.52 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.4 | | 0.26 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 7.6 | | 0.52 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-5 (0-1.5') (Continued)

Lab Sample ID: 500-136651-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Iron | 11000 | | 10 | 5.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 19 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 670 | | 0.52 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 7.4 | | 0.52 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.61 | | 0.52 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 22 | | 0.26 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 28 | | 1.0 | 0.45 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.43 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.28 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.033 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.041 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.032 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.011 | J | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.019 | J | 0.039 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.010 | J | 0.039 | 0.0085 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.011 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.012 | J | 0.039 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.012 | J | 0.080 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.026 | J | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.014 | J | 0.039 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 3.8 | | 0.51 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 97 | | 0.51 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.47 | | 0.20 | 0.048 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.058 | J B | 0.10 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.51 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 4.5 | | 0.26 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.2 | | 0.51 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 10000 | | 10 | 5.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 250 | | 0.51 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.6 | | 0.51 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.66 | | 0.51 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 21 | | 0.26 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 36 | | 1.0 | 0.45 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.51 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.88 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.033 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.051 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.026 | | 0.018 | 0.0060 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-3 (0-1.5') (Continued)

Lab Sample ID: 500-136651-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.0068 | J | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.018 | J | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.0085 | J | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.012 | J | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.0086 | J | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 5.1 | | 0.53 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 58 | | 0.53 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.37 | | 0.21 | 0.049 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.53 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 4.9 | | 0.26 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 5.9 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 12000 | | 11 | 5.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 15 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 370 | | 0.53 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 6.6 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.0 | | 0.53 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 23 | | 0.26 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 26 | | 1.1 | 0.47 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.42 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.016 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.10 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.060 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.027 | | 0.018 | 0.0060 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.031 | J | 0.036 | 0.0049 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.040 | | 0.036 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.053 | | 0.036 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.012 | J | 0.036 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.019 | J | 0.036 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.047 | | 0.036 | 0.0099 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.038 | | 0.036 | 0.0068 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.011 | J | 0.036 | 0.0094 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.018 | J | 0.074 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0080 | J | 0.036 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.046 | | 0.036 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.040 | | 0.036 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.24 | J | 1.1 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 3.8 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 29 | | 0.55 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.29 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.61 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 9.2 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 2.5 | | 0.27 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 9700 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-2 (0-1.5') (Continued)

Lab Sample ID: 500-136651-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Lead | 210 | | 0.27 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 170 | | 0.55 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.7 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.45 | J | 0.55 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 9.8 | | 0.27 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 75 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.45 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0028 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.29 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.17 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.052 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.037 | | 0.017 | 0.0058 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.033 | J | 0.037 | 0.0063 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.088 | | 0.037 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.086 | | 0.037 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.090 | | 0.037 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.058 | | 0.037 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.044 | | 0.037 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.11 | | 0.037 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.069 | J | 0.19 | 0.044 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.11 | | 0.037 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.035 | J | 0.037 | 0.0097 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.12 | | 0.076 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.049 | | 0.037 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.24 | | 0.037 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.15 | | 0.037 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.0 | | 0.47 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 77 | | 0.47 | 0.054 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.53 | | 0.19 | 0.044 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.18 | B | 0.095 | 0.017 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.47 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.3 | | 0.24 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 11 | | 0.47 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 9.5 | 4.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 86 | | 0.24 | 0.11 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 900 | | 0.47 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.47 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.81 | | 0.47 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Silver | 0.080 | J | 0.24 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 24 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 55 | | 0.95 | 0.42 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.72 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-1 (0-1.5') (Continued)

Lab Sample ID: 500-136651-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Cadmium | 0.0026 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.018 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.20 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.031 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.010 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.057 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.035 | | 0.018 | 0.0059 | mg/Kg | 1 | * | 7471B | Total/NA |
| pH | 8.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|---------------------|--------|----------------|----------------|
| 500-136651-1 | 3160-55-1 (0-3) | Solid | 11/01/17 08:05 | 11/02/17 09:00 |
| 500-136651-2 | 3160-55-2 (0-3) | Solid | 11/01/17 08:15 | 11/02/17 09:00 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Solid | 11/01/17 08:25 | 11/02/17 09:00 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Solid | 11/01/17 08:35 | 11/02/17 09:00 |
| 500-136651-5 | 3160-64-1 (0-1.5') | Solid | 11/01/17 08:50 | 11/02/17 09:00 |
| 500-136651-6 | 3160-64-2 (0-1.5') | Solid | 11/01/17 09:00 | 11/02/17 09:00 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Solid | 11/01/17 09:10 | 11/02/17 09:00 |
| 500-136651-8 | 3160-62-10 (0-1.5') | Solid | 11/01/17 09:20 | 11/02/17 09:00 |
| 500-136651-9 | 3160-62-9 (0-1.5') | Solid | 11/01/17 09:30 | 11/02/17 09:00 |
| 500-136651-10 | 3160-62-8 (0-1.5') | Solid | 11/01/17 09:40 | 11/02/17 09:00 |
| 500-136651-11 | 3160-62-7 (0-1.5') | Solid | 11/01/17 09:50 | 11/02/17 09:00 |
| 500-136651-12 | 3160-62-6 (0-1.5') | Solid | 11/01/17 10:00 | 11/02/17 09:00 |
| 500-136651-13 | 3160-62-5 (0-1.5') | Solid | 11/01/17 10:10 | 11/02/17 09:00 |
| 500-136651-14 | 3160-62-4 (0-1.5') | Solid | 11/01/17 10:20 | 11/02/17 09:00 |
| 500-136651-15 | 3160-62-3 (0-1.5') | Solid | 11/01/17 11:30 | 11/02/17 09:00 |
| 500-136651-16 | 3160-62-2 (0-1.5') | Solid | 11/01/17 11:40 | 11/02/17 09:00 |
| 500-136651-17 | 3160-62-1 (0-1.5') | Solid | 11/01/17 11:50 | 11/02/17 09:00 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0020 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00095 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00087 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 12:51 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 12:51 | 1 |
| Toluene-d8 (Surr) | 94 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 12:51 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.036 | J | 0.040 | 0.0078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Benzo[b]fluoranthene | 0.037 | J | 0.040 | 0.0087 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Benzo[g,h,i]perylene | 0.035 | J | 0.040 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Methylnaphthalene | <0.081 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.65 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Phenanthrene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Pyrene | 0.013 | J | 0.040 | 0.0080 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 66 | | 44 - 121 | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2-Fluorophenol | 79 | | 46 - 133 | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Nitrobenzene-d5 | 68 | | 41 - 120 | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Phenol-d5 | 72 | | 46 - 125 | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| Terphenyl-d14 | 93 | | 35 - 160 | 11/08/17 17:13 | 11/11/17 05:00 | 1 |
| 2,4,6-Tribromophenol | 63 | | 25 - 139 | 11/08/17 17:13 | 11/11/17 05:00 | 1 |

Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Aldrin | <0.0021 | | 0.0021 | 0.00086 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| alpha-BHC | <0.0021 | | 0.0021 | 0.00052 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| alpha-Chlordane | <0.0021 | | 0.0021 | 0.0010 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| beta-BHC | <0.0021 | | 0.0021 | 0.00064 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| 4,4'-DDD | <0.0021 | | 0.0021 | 0.00041 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| 4,4'-DDE | <0.0021 | | 0.0021 | 0.00034 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| 4,4'-DDT | <0.0021 | | 0.0021 | 0.0011 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| delta-BHC | <0.0021 | | 0.0021 | 0.00065 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Dieldrin | <0.0021 | | 0.0021 | 0.00028 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Endosulfan I | <0.0021 | | 0.0021 | 0.00090 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Endosulfan II | <0.0021 | | 0.0021 | 0.00033 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Endosulfan sulfate | <0.0021 | | 0.0021 | 0.00038 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Endrin | <0.0021 | | 0.0021 | 0.00029 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Endrin aldehyde | <0.0021 | | 0.0021 | 0.00035 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Endrin ketone | <0.0021 | | 0.0021 | 0.00047 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| gamma-BHC (Lindane) | <0.0021 | | 0.0021 | 0.00045 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| gamma-Chlordane | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Heptachlor | <0.0021 | | 0.0021 | 0.00087 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Heptachlor epoxide | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Methoxychlor | <0.010 | | 0.010 | 0.00040 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Toxaphene | <0.021 | | 0.021 | 0.0087 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:14 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl | 94 | | 33 - 148 | 11/08/17 07:22 | 11/08/17 22:14 | 1 |
| Tetrachloro-m-xylene | 89 | | 30 - 121 | 11/08/17 07:22 | 11/08/17 22:14 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.41 | | 0.41 | 0.085 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 04:42 | 10 |
| Dichlorprop | <0.41 | | 0.41 | 0.11 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 04:42 | 10 |
| 2,4-D | <0.41 | | 0.41 | 0.12 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 04:42 | 10 |
| Silvex (2,4,5-TP) | <0.41 | | 0.41 | 0.10 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 04:42 | 10 |
| 2,4,5-T | <0.41 | | 0.41 | 0.10 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 04:42 | 10 |
| 2,4-DB | <0.41 | | 0.41 | 0.12 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 04:42 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA | 47 | | 25 - 120 | 11/08/17 22:08 | 11/10/17 04:42 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <5.4 | F1 | 5.4 | 1.0 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Arsenic | 8.2 | F1 | 2.7 | 0.92 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Barium | 100 | F1 F2 | 2.7 | 0.31 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Beryllium | 1.0 | J | 1.1 | 0.25 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Cadmium | 0.14 | J | 0.54 | 0.097 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Chromium | 17 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Cobalt | 9.4 | | 0.27 | 0.070 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Copper | 11 | F1 | 0.54 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Iron | 25000 | | 54 | 28 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Lead | 14 | F2 F1 | 0.27 | 0.12 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Manganese | 600 | F2 | 2.7 | 0.39 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Nickel | 19 | | 0.54 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Selenium | <2.7 | F1 | 2.7 | 1.6 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 22:40 | 5 |
| Silver | <0.27 | F1 | 0.27 | 0.069 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Thallium | <0.54 | F1 | 0.54 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Vanadium | 28 | | 0.27 | 0.063 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |
| Zinc | 54 | F1 | 1.1 | 0.47 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:22 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Barium | 0.51 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Copper | 0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Iron | 0.42 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Manganese | 0.12 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Nickel | 0.023 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |
| Zinc | 0.048 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/06/17 11:00 | 11/07/17 15:41 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/06/17 11:00 | 11/07/17 15:41 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/06/17 14:30 | 11/07/17 09:16 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.019 | J | 0.021 | 0.0069 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:21 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.2 | | 0.20 | 0.20 | SU | - | | 11/08/17 17:14 | 1 |



Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.024 | | 0.017 | 0.0076 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00036 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Bromomethane | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 2-Butanone (MEK) | <0.0044 | | 0.0044 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Carbon disulfide | <0.0044 | | 0.0044 | 0.00091 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Chloroethane | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Chloromethane | <0.0044 | | 0.0044 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,2-Dichloroethane | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,3-Dichloropropane, Total | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 2-Hexanone | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Methylene Chloride | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00077 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Vinyl acetate | <0.0044 | | 0.0044 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00077 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Xylenes, Total | <0.0035 | | 0.0035 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 13:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Dibromofluoromethane | 97 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 13:41 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 13:41 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Benzo[a]anthracene | 0.0075 | J | 0.038 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.018 | J | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Benzo[b]fluoranthene | <0.038 | F1 | 0.038 | 0.0083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Benzo[g,h,i]perylene | <0.038 | F1 | 0.038 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Benzo[k]fluoranthene | <0.038 | F1 | 0.038 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | F1 | 0.19 | 0.070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Butyl benzyl phthalate | <0.19 | F1 | 0.19 | 0.073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Dibenz(a,h)anthracene | <0.038 | F1 | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | F2 | 0.19 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4-Dinitrophenol | <0.77 | F1 | 0.77 | 0.68 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Fluoranthene | 0.013 | J | 0.038 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0089 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Hexachlorocyclopentadiene | <0.77 | F1 | 0.77 | 0.22 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Hexachloroethane | <0.19 | F1 | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | F1 | 0.038 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Methylnaphthalene | 0.0080 | J | 0.077 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Methylphenol | <0.19 | F1 F2 | 0.19 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.37 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.62 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Phenanthrene | 0.014 | J | 0.038 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Pyrene | 0.015 | J | 0.038 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 72 | | 44 - 121 | | | | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2-Fluorophenol | 79 | | 46 - 133 | | | | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | | | | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Phenol-d5 | 85 | | 46 - 125 | | | | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| Terphenyl-d14 | 86 | | 35 - 160 | | | | 11/08/17 17:13 | 11/09/17 12:58 | 1 |
| 2,4,6-Tribromophenol | 85 | | 25 - 139 | | | | 11/08/17 17:13 | 11/09/17 12:58 | 1 |

Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|------------------|------------------|---------------|---------|-------|---|-----------------|-----------------|----------------|
| Aldrin | <0.0020 | | 0.0020 | 0.00081 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| alpha-BHC | <0.0020 | | 0.0020 | 0.00049 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| alpha-Chlordane | <0.0020 | | 0.0020 | 0.00098 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| beta-BHC | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| 4,4'-DDD | <0.0020 | | 0.0020 | 0.00039 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| 4,4'-DDE | <0.0020 | | 0.0020 | 0.00032 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| 4,4'-DDT | <0.0020 | | 0.0020 | 0.0010 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| delta-BHC | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Dieldrin | <0.0020 | | 0.0020 | 0.00027 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Endosulfan I | <0.0020 | | 0.0020 | 0.00085 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Endosulfan II | <0.0020 | | 0.0020 | 0.00032 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Endosulfan sulfate | <0.0020 | | 0.0020 | 0.00035 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Endrin | <0.0020 | | 0.0020 | 0.00027 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Endrin aldehyde | <0.0020 | | 0.0020 | 0.00033 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Endrin ketone | <0.0020 | | 0.0020 | 0.00044 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| gamma-BHC (Lindane) | <0.0020 | | 0.0020 | 0.00042 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| gamma-Chlordane | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Heptachlor | <0.0020 | | 0.0020 | 0.00082 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Heptachlor epoxide | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Methoxychlor | <0.0097 | | 0.0097 | 0.00038 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Toxaphene | <0.019 | | 0.019 | 0.0082 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| DCB Decachlorobiphenyl | 82 | | 33 - 148 | | | | 11/08/17 07:22 | 11/08/17 22:35 | 1 |
| Tetrachloro-m-xylene | 75 | | 30 - 121 | | | | 11/08/17 07:22 | 11/08/17 22:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.9

Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.40 | | 0.40 | 0.083 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:06 | 10 |
| Dichlorprop | <0.40 | | 0.40 | 0.11 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:06 | 10 |
| 2,4-D | <0.40 | | 0.40 | 0.11 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:06 | 10 |
| Silvex (2,4,5-TP) | <0.40 | | 0.40 | 0.10 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:06 | 10 |
| 2,4,5-T | <0.40 | | 0.40 | 0.098 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:06 | 10 |
| 2,4-DB | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:06 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA | 50 | | 25 - 120 | 11/08/17 22:08 | 11/10/17 05:06 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:00 | 1 |
| Arsenic | 10 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Barium | 92 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Beryllium | 0.56 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Chromium | 22 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Cobalt | 7.1 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Copper | 17 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Iron | 23000 | | 11 | 5.7 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Lead | 21 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Manganese | 410 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Nickel | 14 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Selenium | 1.1 | | 0.55 | 0.33 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:00 | 1 |
| Silver | <0.28 | | 0.28 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Thallium | <0.55 | | 0.55 | 0.28 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Vanadium | 43 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |
| Zinc | 58 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:42 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Barium | 0.48 | J | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Iron | 0.42 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Manganese | 0.021 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |
| Zinc | 0.049 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:43 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.9

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/06/17 11:00 | 11/07/17 15:46 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/06/17 11:00 | 11/07/17 15:46 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/06/17 14:30 | 11/07/17 09:21 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.038 | | 0.020 | 0.0067 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:23 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.0 | | 0.20 | 0.20 | SU | - | | 11/08/17 17:14 | 1 |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 87.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.016 | | 0.016 | 0.0071 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Benzene | <0.0016 | | 0.0016 | 0.00042 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Bromodichloromethane | <0.0016 | | 0.0016 | 0.00033 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Bromoform | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Bromomethane | <0.0041 | | 0.0041 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 2-Butanone (MEK) | <0.0041 | | 0.0041 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Carbon disulfide | <0.0041 | | 0.0041 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Carbon tetrachloride | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Chlorobenzene | <0.0016 | | 0.0016 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Chloroethane | <0.0041 | | 0.0041 | 0.0012 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Chloroform | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Chloromethane | <0.0041 | | 0.0041 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| cis-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| cis-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Dibromochloromethane | <0.0016 | | 0.0016 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,1-Dichloroethane | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,2-Dichloroethane | <0.0041 | | 0.0041 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,1-Dichloroethene | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,2-Dichloropropane | <0.0016 | | 0.0016 | 0.00042 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,3-Dichloropropene, Total | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Ethylbenzene | <0.0016 | | 0.0016 | 0.00078 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 2-Hexanone | <0.0041 | | 0.0041 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Methylene Chloride | <0.0041 | | 0.0041 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0041 | | 0.0041 | 0.0012 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Methyl tert-butyl ether | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Styrene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0016 | | 0.0016 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Tetrachloroethene | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Toluene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| trans-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| trans-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,1,1-Trichloroethane | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,1,2-Trichloroethane | <0.0016 | | 0.0016 | 0.00070 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Trichloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Vinyl acetate | <0.0041 | | 0.0041 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Vinyl chloride | <0.0016 | | 0.0016 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Xylenes, Total | <0.0033 | | 0.0033 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:07 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 14:07 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 14:07 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.036 | | 0.036 | 0.0065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Acenaphthylene | <0.036 | | 0.036 | 0.0047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Anthracene | 0.0084 | J | 0.036 | 0.0060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Benzo[a]anthracene | 0.030 | J | 0.036 | 0.0048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.058 | | 0.036 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Benzo[b]fluoranthene | 0.071 | | 0.036 | 0.0078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Benzo[g,h,i]perylene | 0.047 | | 0.036 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Benzo[k]fluoranthene | 0.014 | J | 0.036 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Bis(2-chloroethoxy)methane | <0.18 | | 0.18 | 0.037 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Bis(2-chloroethyl)ether | <0.18 | | 0.18 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.18 | | 0.18 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 4-Bromophenyl phenyl ether | <0.18 | | 0.18 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Butyl benzyl phthalate | <0.18 | | 0.18 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Carbazole | <0.18 | | 0.18 | 0.090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 4-Chloroaniline | <0.73 | | 0.73 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 4-Chloro-3-methylphenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Chloronaphthalene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Chlorophenol | <0.18 | | 0.18 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 4-Chlorophenyl phenyl ether | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Chrysene | 0.040 | | 0.036 | 0.0098 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Dibenz(a,h)anthracene | <0.036 | | 0.036 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Dibenzofuran | 0.059 | J | 0.18 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 1,2-Dichlorobenzene | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 1,3-Dichlorobenzene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 1,4-Dichlorobenzene | <0.18 | | 0.18 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 3,3'-Dichlorobenzidine | <0.18 | | 0.18 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4-Dichlorophenol | <0.36 | | 0.36 | 0.085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Diethyl phthalate | <0.18 | | 0.18 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4-Dimethylphenol | <0.36 | | 0.36 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Dimethyl phthalate | <0.18 | | 0.18 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Di-n-butyl phthalate | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.73 | | 0.73 | 0.29 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4-Dinitrophenol | <0.73 | | 0.73 | 0.63 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4-Dinitrotoluene | <0.18 | | 0.18 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,6-Dinitrotoluene | <0.18 | | 0.18 | 0.071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Di-n-octyl phthalate | <0.18 | | 0.18 | 0.059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Fluoranthene | 0.049 | | 0.036 | 0.0067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Fluorene | <0.036 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Hexachlorobenzene | <0.073 | | 0.073 | 0.0083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Hexachlorobutadiene | <0.18 | | 0.18 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Hexachlorocyclopentadiene | <0.73 | | 0.73 | 0.21 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Hexachloroethane | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.042 | | 0.036 | 0.0093 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Isophorone | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Methylnaphthalene | 0.040 | J | 0.073 | 0.0066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Methylphenol | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 3 & 4 Methylphenol | <0.18 | | 0.18 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Naphthalene | 0.023 | J | 0.036 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Nitroaniline | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 3-Nitroaniline | <0.36 | | 0.36 | 0.11 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 4-Nitroaniline | <0.36 | | 0.36 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Nitrobenzene | <0.036 | | 0.036 | 0.0090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Nitrophenol | <0.36 | | 0.36 | 0.085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.73 | | 0.73 | 0.34 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| N-Nitrosodi-n-propylamine | <0.073 | | 0.073 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| N-Nitrosodiphenylamine | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Pentachlorophenol | <0.73 | | 0.73 | 0.58 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Phenanthrene | 0.093 | | 0.036 | 0.0050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Phenol | <0.18 | | 0.18 | 0.080 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Pyrene | 0.051 | | 0.036 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 1,2,4-Trichlorobenzene | <0.18 | | 0.18 | 0.039 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4,5-Trichlorophenol | <0.36 | | 0.36 | 0.082 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4,6-Trichlorophenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 75 | | 44 - 121 | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2-Fluorophenol | 83 | | 46 - 133 | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Nitrobenzene-d5 | 70 | | 41 - 120 | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Phenol-d5 | 86 | | 46 - 125 | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| Terphenyl-d14 | 102 | | 35 - 160 | 11/08/17 17:13 | 11/11/17 05:28 | 1 |
| 2,4,6-Tribromophenol | 71 | | 25 - 139 | 11/08/17 17:13 | 11/11/17 05:28 | 1 |

Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Aldrin | <0.019 | | 0.019 | 0.0075 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| alpha-BHC | <0.019 | | 0.019 | 0.0046 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| alpha-Chlordane | <0.019 | | 0.019 | 0.0092 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| beta-BHC | <0.019 | | 0.019 | 0.0056 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| 4,4'-DDD | <0.019 | | 0.019 | 0.0036 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| 4,4'-DDE | <0.019 | | 0.019 | 0.0030 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| 4,4'-DDT | <0.019 | | 0.019 | 0.0096 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| delta-BHC | <0.019 | | 0.019 | 0.0057 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Dieldrin | <0.019 | | 0.019 | 0.0025 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Endosulfan I | <0.019 | | 0.019 | 0.0080 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Endosulfan II | <0.019 | | 0.019 | 0.0029 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Endosulfan sulfate | <0.019 | | 0.019 | 0.0033 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Endrin | <0.019 | | 0.019 | 0.0025 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Endrin aldehyde | <0.019 | | 0.019 | 0.0031 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Endrin ketone | <0.019 | | 0.019 | 0.0041 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| gamma-BHC (Lindane) | <0.019 | | 0.019 | 0.0039 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| gamma-Chlordane | <0.019 | | 0.019 | 0.0048 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Heptachlor | <0.019 | | 0.019 | 0.0076 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Heptachlor epoxide | <0.019 | | 0.019 | 0.0065 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Methoxychlor | <0.090 | | 0.090 | 0.0035 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Toxaphene | <0.18 | | 0.18 | 0.077 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 22:55 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl | 87 | | 33 - 148 | 11/08/17 07:22 | 11/08/17 22:55 | 10 |
| Tetrachloro-m-xylene | 97 | | 30 - 121 | 11/08/17 07:22 | 11/08/17 22:55 | 10 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 87.4

Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.37 | | 0.37 | 0.077 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:31 | 10 |
| Dichlorprop | <0.37 | | 0.37 | 0.10 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:31 | 10 |
| 2,4-D | <0.37 | | 0.37 | 0.10 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:31 | 10 |
| Silvex (2,4,5-TP) | <0.37 | | 0.37 | 0.095 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:31 | 10 |
| 2,4,5-T | <0.37 | | 0.37 | 0.090 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:31 | 10 |
| 2,4-DB | <0.37 | | 0.37 | 0.11 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:31 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA | 48 | | 25 - 120 | 11/08/17 22:08 | 11/10/17 05:31 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.22 | J | 1.1 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:04 | 1 |
| Arsenic | 6.3 | | 0.54 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Barium | 95 | | 0.54 | 0.061 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Beryllium | 0.54 | | 0.22 | 0.050 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Cadmium | 0.21 | B | 0.11 | 0.019 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Chromium | 14 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Cobalt | 8.8 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Copper | 12 | | 0.54 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Iron | 14000 | | 11 | 5.6 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Lead | 210 | | 0.27 | 0.12 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Manganese | 720 | | 0.54 | 0.078 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Nickel | 14 | | 0.54 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Selenium | 0.42 | J | 0.54 | 0.32 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:04 | 1 |
| Silver | 0.11 | J | 0.27 | 0.069 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Thallium | <0.54 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Vanadium | 22 | | 0.27 | 0.064 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |
| Zinc | 67 | | 1.1 | 0.47 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:46 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Barium | 1.0 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Cadmium | 0.0025 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Copper | 0.016 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Manganese | 0.53 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |
| Zinc | 0.053 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:47 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 87.4

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|-------|-------|------|----|----------------|----------------|---------|
| Manganese | 0.010 | J | 0.025 | 0.010 | mg/L | -- | 11/06/17 11:29 | 11/08/17 21:57 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|----|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | -- | 11/06/17 11:00 | 11/07/17 15:50 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | -- | 11/06/17 11:00 | 11/07/17 15:50 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|----|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | -- | 11/06/17 14:30 | 11/07/17 09:22 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.029 | | 0.018 | 0.0060 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:26 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|------|------|----|----------|----------------|---------|
| pH | 7.3 | | 0.20 | 0.20 | SU | -- | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.030 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.0010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00050 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:32 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 93 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 14:32 | 1 |
| Toluene-d8 (Surr) | 99 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 14:32 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Anthracene | 0.019 | J | 0.039 | 0.0066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Benzo[a]anthracene | 0.063 | | 0.039 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.072 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Benzo[b]fluoranthene | 0.092 | | 0.039 | 0.0086 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Benzo[g,h,i]perylene | 0.026 | J | 0.039 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Benzo[k]fluoranthene | 0.029 | J | 0.039 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Chrysene | 0.083 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Dibenzofuran | 0.049 | J | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Fluoranthene | 0.090 | | 0.039 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.018 | J | 0.039 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Methylnaphthalene | 0.11 | | 0.080 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Naphthalene | 0.071 | | 0.039 | 0.0061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Phenanthrene | 0.16 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Pyrene | 0.12 | | 0.039 | 0.0079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 18:12 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 66 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2-Fluorophenol | 63 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Nitrobenzene-d5 | 52 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Phenol-d5 | 71 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| Terphenyl-d14 | 78 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 18:12 | 1 |
| 2,4,6-Tribromophenol | 74 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 18:12 | 1 |

Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Aldrin | <0.020 | | 0.020 | 0.0082 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| alpha-BHC | <0.020 | | 0.020 | 0.0050 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| alpha-Chlordane | <0.020 | | 0.020 | 0.010 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| beta-BHC | <0.020 | | 0.020 | 0.0061 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| 4,4'-DDD | <0.020 | | 0.020 | 0.0039 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| 4,4'-DDE | <0.020 | | 0.020 | 0.0033 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| 4,4'-DDT | <0.020 | | 0.020 | 0.010 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| delta-BHC | <0.020 | | 0.020 | 0.0062 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Dieldrin | <0.020 | | 0.020 | 0.0027 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Endosulfan I | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Endosulfan II | <0.020 | | 0.020 | 0.0032 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Endosulfan sulfate | <0.020 | | 0.020 | 0.0036 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Endrin | <0.020 | | 0.020 | 0.0027 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Endrin aldehyde | <0.020 | | 0.020 | 0.0033 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Endrin ketone | <0.020 | | 0.020 | 0.0045 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| gamma-BHC (Lindane) | <0.020 | | 0.020 | 0.0043 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| gamma-Chlordane | <0.020 | | 0.020 | 0.0052 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Heptachlor | <0.020 | | 0.020 | 0.0083 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Heptachlor epoxide | <0.020 | | 0.020 | 0.0070 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Methoxychlor | <0.098 | | 0.098 | 0.0038 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Toxaphene | <0.20 | | 0.20 | 0.083 | mg/Kg | ☼ | 11/08/17 07:22 | 11/08/17 23:15 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl | 87 | | 33 - 148 | 11/08/17 07:22 | 11/08/17 23:15 | 10 |
| Tetrachloro-m-xylene | 92 | | 30 - 121 | 11/08/17 07:22 | 11/08/17 23:15 | 10 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.40 | | 0.40 | 0.083 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:55 | 10 |
| Dichlorprop | <0.40 | | 0.40 | 0.11 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:55 | 10 |
| 2,4-D | <0.40 | | 0.40 | 0.11 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:55 | 10 |
| Silvex (2,4,5-TP) | <0.40 | | 0.40 | 0.10 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:55 | 10 |
| 2,4,5-T | <0.40 | | 0.40 | 0.097 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:55 | 10 |
| 2,4-DB | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/08/17 22:08 | 11/10/17 05:55 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|-----------|-----------|----------|----------------|----------------|---------|
| DCAA | 43 | | 25 - 120 | 11/08/17 22:08 | 11/10/17 05:55 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.20 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:08 | 1 |
| Arsenic | 9.2 | | 0.51 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Barium | 120 | | 0.51 | 0.058 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Beryllium | 0.60 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Cadmium | 0.44 | B | 0.10 | 0.018 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Chromium | 35 | | 0.51 | 0.25 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Cobalt | 10 | | 0.25 | 0.066 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Copper | 19 | | 0.51 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Iron | 16000 | | 10 | 5.3 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Lead | 270 | | 0.25 | 0.12 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Manganese | 980 | | 0.51 | 0.073 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:08 | 1 |
| Nickel | 13 | | 0.51 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Selenium | 1.0 | | 0.51 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:08 | 1 |
| Silver | 0.15 | J | 0.25 | 0.065 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Thallium | <0.51 | | 0.51 | 0.25 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Vanadium | 26 | | 0.25 | 0.060 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |
| Zinc | 100 | | 1.0 | 0.44 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 16:50 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Barium | 0.76 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Cadmium | 0.0029 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Copper | 0.017 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Iron | 0.27 | J | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Manganese | 0.042 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |
| Zinc | 0.093 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/06/17 11:00 | 11/07/17 15:55 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/06/17 11:00 | 11/07/17 15:55 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/06/17 14:30 | 11/07/17 09:27 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.041 | | 0.020 | 0.0065 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:28 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.3 | | 0.20 | 0.20 | SU | - | | 11/08/17 17:14 | 1 |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

Date Collected: 11/01/17 08:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.021 | | 0.021 | 0.0092 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Benzene | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Bromodichloromethane | <0.0021 | | 0.0021 | 0.00043 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Bromoform | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Bromomethane | <0.0053 | | 0.0053 | 0.0020 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 2-Butanone (MEK) | <0.0053 | | 0.0053 | 0.0024 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Carbon disulfide | <0.0053 | | 0.0053 | 0.0011 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Carbon tetrachloride | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Chlorobenzene | <0.0021 | | 0.0021 | 0.00078 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Chloroethane | <0.0053 | | 0.0053 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Chloroform | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Chloromethane | <0.0053 | | 0.0053 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| cis-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| cis-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Dibromochloromethane | <0.0021 | | 0.0021 | 0.00069 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,1-Dichloroethane | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,2-Dichloroethane | <0.0053 | | 0.0053 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,1-Dichloroethene | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,2-Dichloropropane | <0.0021 | | 0.0021 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,3-Dichloropropene, Total | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Ethylbenzene | <0.0021 | | 0.0021 | 0.0010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 2-Hexanone | <0.0053 | | 0.0053 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Methylene Chloride | <0.0053 | | 0.0053 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0053 | | 0.0053 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Methyl tert-butyl ether | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Styrene | <0.0021 | | 0.0021 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0021 | | 0.0021 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Tetrachloroethene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Toluene | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| trans-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00094 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| trans-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,1,1-Trichloroethane | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,1,2-Trichloroethane | <0.0021 | | 0.0021 | 0.00091 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Trichloroethene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Vinyl acetate | <0.0053 | | 0.0053 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Vinyl chloride | <0.0021 | | 0.0021 | 0.00094 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Xylenes, Total | <0.0042 | | 0.0042 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 14:57 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 14:57 | 1 |
| Toluene-d8 (Surr) | 100 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 14:57 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | 0.035 | J | 0.041 | 0.0075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Acenaphthylene | 0.0088 | J | 0.041 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Anthracene | 0.13 | | 0.041 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Benzo[a]anthracene | 1.1 | | 0.041 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

Date Collected: 11/01/17 08:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.85 | | 0.041 | 0.0081 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Benzo[b]fluoranthene | 1.3 | | 0.041 | 0.0090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Benzo[g,h,i]perylene | 0.30 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Benzo[k]fluoranthene | 0.48 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Carbazole | 0.15 | J | 0.21 | 0.10 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 4-Chloroaniline | <0.84 | | 0.84 | 0.20 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Chrysene | 1.4 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Dibenz(a,h)anthracene | 0.17 | | 0.041 | 0.0081 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Dibenzofuran | 0.061 | J | 0.21 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.84 | | 0.84 | 0.34 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4-Dinitrophenol | <0.84 | | 0.84 | 0.74 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.082 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Fluoranthene | 1.5 | | 0.041 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Fluorene | 0.026 | J | 0.041 | 0.0059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Hexachlorobenzene | <0.084 | | 0.084 | 0.0097 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Hexachlorocyclopentadiene | <0.84 | | 0.84 | 0.24 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.33 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Methylnaphthalene | 0.11 | | 0.084 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Naphthalene | 0.052 | | 0.041 | 0.0064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

Date Collected: 11/01/17 08:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.84 | | 0.84 | 0.40 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| N-Nitrosodi-n-propylamine | <0.084 | | 0.084 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Pentachlorophenol | <0.84 | | 0.84 | 0.67 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Phenanthrene | 0.84 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Phenol | <0.21 | | 0.21 | 0.093 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Pyrene | 1.4 | | 0.041 | 0.0083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.095 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/11/17 05:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 72 | | 44 - 121 | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2-Fluorophenol | 77 | | 46 - 133 | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Nitrobenzene-d5 | 68 | | 41 - 120 | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Phenol-d5 | 75 | | 46 - 125 | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| Terphenyl-d14 | 90 | | 35 - 160 | 11/08/17 17:13 | 11/11/17 05:55 | 1 |
| 2,4,6-Tribromophenol | 68 | | 25 - 139 | 11/08/17 17:13 | 11/11/17 05:55 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.021 | | 0.021 | 0.0073 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| PCB-1221 | <0.021 | | 0.021 | 0.0091 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| PCB-1232 | <0.021 | | 0.021 | 0.0090 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| PCB-1242 | <0.021 | | 0.021 | 0.0068 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| PCB-1248 | <0.021 | | 0.021 | 0.0082 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| PCB-1254 | <0.021 | | 0.021 | 0.0045 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| PCB-1260 | 0.020 | J | 0.021 | 0.010 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 12:57 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 96 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 12:57 | 1 |
| DCB Decachlorobiphenyl | 89 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 12:57 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.24 | J | 1.2 | 0.24 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:24 | 1 |
| Arsenic | 5.8 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Barium | 67 | | 0.61 | 0.069 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Beryllium | 0.45 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Cadmium | 0.37 | B | 0.12 | 0.022 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Chromium | 13 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Cobalt | 5.3 | | 0.30 | 0.079 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Copper | 18 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Iron | 12000 | | 12 | 6.3 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Lead | 160 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Manganese | 270 | | 0.61 | 0.088 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Nickel | 11 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Selenium | <0.61 | | 0.61 | 0.36 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:24 | 1 |
| Silver | <0.30 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

Date Collected: 11/01/17 08:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.0

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.61 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Vanadium | 21 | | 0.30 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |
| Zinc | 73 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:03 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Barium | 0.76 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Cadmium | 0.0028 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Iron | 0.34 | J | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Lead | 0.022 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Manganese | 0.097 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |
| Zinc | 0.072 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:55 | 1 |

Method: 6010B - SPLP Metals - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | 0.14 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:29 | 11/08/17 22:01 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:00 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:00 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:28 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.041 | | 0.021 | 0.0069 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:30 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.1 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.024 | | 0.024 | 0.010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Benzene | <0.0024 | | 0.0024 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Bromodichloromethane | <0.0024 | | 0.0024 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Bromoform | <0.0024 | | 0.0024 | 0.00070 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Bromomethane | <0.0060 | | 0.0060 | 0.0023 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 2-Butanone (MEK) | <0.0060 | | 0.0060 | 0.0027 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Carbon disulfide | <0.0060 | | 0.0060 | 0.0012 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Carbon tetrachloride | <0.0024 | | 0.0024 | 0.00070 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Chlorobenzene | <0.0024 | | 0.0024 | 0.00089 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Chloroethane | <0.0060 | | 0.0060 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Chloroform | <0.0024 | | 0.0024 | 0.00083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Chloromethane | <0.0060 | | 0.0060 | 0.0024 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| cis-1,2-Dichloroethene | <0.0024 | | 0.0024 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| cis-1,3-Dichloropropene | <0.0024 | | 0.0024 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Dibromochloromethane | <0.0024 | | 0.0024 | 0.00079 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,1-Dichloroethane | <0.0024 | | 0.0024 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,2-Dichloroethane | <0.0060 | | 0.0060 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,1-Dichloroethene | <0.0024 | | 0.0024 | 0.00083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,2-Dichloropropane | <0.0024 | | 0.0024 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,3-Dichloropropane, Total | <0.0024 | | 0.0024 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Ethylbenzene | <0.0024 | | 0.0024 | 0.0011 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 2-Hexanone | <0.0060 | | 0.0060 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Methylene Chloride | <0.0060 | | 0.0060 | 0.0024 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0060 | | 0.0060 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Methyl tert-butyl ether | <0.0024 | | 0.0024 | 0.00070 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Styrene | <0.0024 | | 0.0024 | 0.00073 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0024 | | 0.0024 | 0.00077 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Tetrachloroethene | <0.0024 | | 0.0024 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Toluene | <0.0024 | | 0.0024 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| trans-1,2-Dichloroethene | <0.0024 | | 0.0024 | 0.0011 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| trans-1,3-Dichloropropene | <0.0024 | | 0.0024 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,1,1-Trichloroethane | <0.0024 | | 0.0024 | 0.00081 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,1,2-Trichloroethane | <0.0024 | | 0.0024 | 0.0010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Trichloroethene | <0.0024 | | 0.0024 | 0.00081 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Vinyl acetate | <0.0060 | | 0.0060 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Vinyl chloride | <0.0024 | | 0.0024 | 0.0011 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Xylenes, Total | <0.0048 | | 0.0048 | 0.00077 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:22 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Dibromofluoromethane | 99 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 93 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 15:22 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 15:22 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Anthracene | 0.0079 | J | 0.040 | 0.0067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Benzo[a]anthracene | 0.021 | J | 0.040 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.029 | J | 0.040 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Benzo[b]fluoranthene | 0.030 | J | 0.040 | 0.0086 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Chrysene | 0.025 | J | 0.040 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Fluoranthene | 0.026 | J | 0.040 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Methylnaphthalene | 0.021 | J | 0.080 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Naphthalene | 0.0082 | J | 0.040 | 0.0061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Phenanthrene | 0.044 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Pyrene | 0.032 | J | 0.040 | 0.0079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 69 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2-Fluorophenol | 72 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Nitrobenzene-d5 | 59 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Phenol-d5 | 78 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| Terphenyl-d14 | 88 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 16:28 | 1 |
| 2,4,6-Tribromophenol | 91 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 16:28 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.021 | | 0.021 | 0.0073 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| PCB-1221 | <0.021 | | 0.021 | 0.0090 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| PCB-1232 | <0.021 | | 0.021 | 0.0089 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| PCB-1242 | <0.021 | | 0.021 | 0.0067 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| PCB-1248 | <0.021 | | 0.021 | 0.0081 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| PCB-1254 | <0.021 | | 0.021 | 0.0044 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| PCB-1260 | 0.021 | | 0.021 | 0.010 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 95 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 13:13 | 1 |
| DCB Decachlorobiphenyl | 88 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 13:13 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:28 | 1 |
| Arsenic | 4.2 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Barium | 59 | | 0.61 | 0.070 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Beryllium | 0.43 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Cadmium | <0.12 | | 0.12 | 0.022 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Chromium | 11 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Cobalt | 3.7 | | 0.31 | 0.080 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Copper | 9.3 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Iron | 9200 | | 12 | 6.3 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Lead | 17 | | 0.31 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Manganese | 390 | | 0.61 | 0.088 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Nickel | 6.2 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Selenium | 0.60 | J | 0.61 | 0.36 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:28 | 1 |
| Silver | <0.31 | | 0.31 | 0.079 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.5

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.61 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Vanadium | 22 | | 0.31 | 0.072 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |
| Zinc | 31 | | 1.2 | 0.54 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:07 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Barium | 0.46 | J | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Cadmium | 0.0021 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Copper | 0.023 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Iron | 0.82 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Manganese | 0.093 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |
| Zinc | 0.11 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:08 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:04 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:04 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:29 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.074 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:33 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.1 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.00099 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,3-Dichloropropene, Total | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 15:47 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 15:47 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 15:47 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Anthracene | 0.034 | J | 0.038 | 0.0064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Benzo[a]anthracene | 0.055 | | 0.038 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.054 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Benzo[b]fluoranthene | 0.069 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Benzo[g,h,i]perylene | 0.023 | J | 0.038 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Benzo[k]fluoranthene | 0.019 | J | 0.038 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Chrysene | 0.064 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Dibenzofuran | 0.047 | J | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.68 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Fluoranthene | 0.077 | | 0.038 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0089 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.018 | J | 0.038 | 0.0099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Methylnaphthalene | 0.087 | | 0.077 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Naphthalene | 0.034 | J | 0.038 | 0.0059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.62 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Phenanthrene | 0.20 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Pyrene | 0.085 | | 0.038 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 62 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2-Fluorophenol | 63 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Nitrobenzene-d5 | 55 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Phenol-d5 | 71 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| Terphenyl-d14 | 82 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 16:54 | 1 |
| 2,4,6-Tribromophenol | 72 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 16:54 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0069 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0085 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0064 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0077 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0042 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0096 | mg/Kg | ☼ | 11/08/17 07:22 | 11/09/17 13:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 94 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 13:28 | 1 |
| DCB Decachlorobiphenyl | 81 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 13:28 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:32 | 1 |
| Arsenic | 6.0 | | 0.57 | 0.20 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Barium | 110 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Beryllium | 0.65 | | 0.23 | 0.054 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Cadmium | 0.30 | B | 0.11 | 0.021 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Chromium | 12 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Cobalt | 9.1 | | 0.29 | 0.075 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Copper | 34 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Iron | 13000 | | 11 | 6.0 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Lead | 110 | | 0.29 | 0.13 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Manganese | 300 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Nickel | 18 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Selenium | 0.90 | | 0.57 | 0.34 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:32 | 1 |
| Silver | <0.29 | | 0.29 | 0.074 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 83.6

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.57 | | 0.57 | 0.29 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Vanadium | 19 | | 0.29 | 0.068 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |
| Zinc | 91 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:11 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Barium | 1.4 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Cadmium | 0.0035 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Copper | 0.013 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Manganese | 0.41 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |
| Zinc | 0.047 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:12 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.093 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:29 | 11/08/17 22:13 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:09 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:09 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:31 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.041 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:35 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.2 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

Date Collected: 11/01/17 09:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00040 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Bromomethane | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 2-Butanone (MEK) | <0.0049 | | 0.0049 | 0.0022 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Carbon disulfide | <0.0049 | | 0.0049 | 0.0010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Chloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Chloromethane | <0.0049 | | 0.0049 | 0.0020 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,2-Dichloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00094 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 2-Hexanone | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Methylene Chloride | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Vinyl acetate | <0.0049 | | 0.0049 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:12 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 16:12 | 1 |
| Toluene-d8 (Surr) | 100 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 16:12 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Anthracene | 0.013 | J | 0.040 | 0.0068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Benzo[a]anthracene | 0.030 | J | 0.040 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

Date Collected: 11/01/17 09:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.031 | J | 0.040 | 0.0079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Benzo[b]fluoranthene | 0.030 | J | 0.040 | 0.0088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Chrysene | 0.031 | J | 0.040 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.097 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.72 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.080 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Fluoranthene | 0.034 | J | 0.040 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.23 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Methylnaphthalene | 0.064 | J | 0.082 | 0.0075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Naphthalene | 0.030 | J | 0.040 | 0.0063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

Date Collected: 11/01/17 09:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.65 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Phenanthrene | 0.098 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Pyrene | 0.041 | | 0.040 | 0.0081 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.093 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 49 | | 44 - 121 | | | | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2-Fluorophenol | 46 | | 46 - 133 | | | | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Nitrobenzene-d5 | 41 | | 41 - 120 | | | | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Phenol-d5 | 52 | | 46 - 125 | | | | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| Terphenyl-d14 | 60 | | 35 - 160 | | | | 11/08/17 17:13 | 11/09/17 17:20 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | | | | 11/08/17 17:13 | 11/09/17 17:20 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:36 | 1 |
| Arsenic | 6.4 | | 0.54 | 0.19 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Barium | 85 | | 0.54 | 0.062 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Beryllium | 0.52 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Chromium | 13 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Cobalt | 6.5 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Copper | 12 | | 0.54 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Iron | 14000 | | 11 | 5.7 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Lead | 22 | | 0.27 | 0.13 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Manganese | 640 | | 0.54 | 0.079 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Nickel | 7.1 | | 0.54 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Selenium | 0.90 | | 0.54 | 0.32 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:36 | 1 |
| Silver | <0.27 | | 0.27 | 0.070 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Thallium | <0.54 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Vanadium | 29 | | 0.27 | 0.064 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |
| Zinc | 32 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:15 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Barium | 0.38 | J | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Iron | 0.60 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

Date Collected: 11/01/17 09:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Manganese | 0.14 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |
| Zinc | 0.075 J | | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:16 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:14 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:14 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:32 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.021 | | 0.019 | 0.0064 | mg/Kg | ✱ | 11/03/17 15:15 | 11/06/17 11:37 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.5 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 77.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0079 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00094 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00086 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 16:37 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 88 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 16:37 | 1 |
| Toluene-d8 (Surr) | 100 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 16:37 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0074 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Anthracene | <0.041 | | 0.041 | 0.0069 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Benzo[a]anthracene | 0.0099 | J | 0.041 | 0.0055 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 77.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.022 | J | 0.041 | 0.0080 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Benzo[b]fluoranthene | <0.041 | | 0.041 | 0.0089 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.078 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 4-Chloroaniline | <0.83 | | 0.83 | 0.19 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Chrysene | 0.012 | J | 0.041 | 0.011 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.83 | | 0.83 | 0.33 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4-Dinitrophenol | <0.83 | | 0.83 | 0.72 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Fluoranthene | 0.014 | J | 0.041 | 0.0076 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Hexachlorobenzene | <0.083 | | 0.083 | 0.0095 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Hexachlorocyclopentadiene | <0.83 | | 0.83 | 0.24 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Methylnaphthalene | 0.016 | J | 0.083 | 0.0076 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Naphthalene | <0.041 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 77.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.83 | | 0.83 | 0.39 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| N-Nitrosodi-n-propylamine | <0.083 | | 0.083 | 0.050 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Pentachlorophenol | <0.83 | | 0.83 | 0.66 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Phenanthrene | 0.023 | J | 0.041 | 0.0057 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Phenol | <0.21 | | 0.21 | 0.091 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Pyrene | 0.015 | J | 0.041 | 0.0082 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.094 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 72 | | 44 - 121 | | | | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2-Fluorophenol | 77 | | 46 - 133 | | | | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Nitrobenzene-d5 | 66 | | 41 - 120 | | | | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Phenol-d5 | 76 | | 46 - 125 | | | | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| Terphenyl-d14 | 67 | | 35 - 160 | | | | 11/13/17 18:14 | 11/14/17 11:57 | 1 |
| 2,4,6-Tribromophenol | 73 | | 25 - 139 | | | | 11/13/17 18:14 | 11/14/17 11:57 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:40 | 1 |
| Arsenic | 5.0 | | 0.62 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Barium | 86 | | 0.62 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Beryllium | 0.49 | | 0.25 | 0.058 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Cadmium | 0.038 | J B | 0.12 | 0.022 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Chromium | 14 | | 0.62 | 0.31 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Cobalt | 6.3 | | 0.31 | 0.081 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Copper | 8.8 | | 0.62 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Iron | 12000 | | 12 | 6.5 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Lead | 22 | | 0.31 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Manganese | 300 | | 0.62 | 0.090 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Nickel | 12 | | 0.62 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Selenium | 0.96 | | 0.62 | 0.37 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:40 | 1 |
| Silver | <0.31 | | 0.31 | 0.080 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Thallium | <0.62 | | 0.62 | 0.31 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Vanadium | 23 | | 0.31 | 0.073 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |
| Zinc | 38 | | 1.2 | 0.55 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:19 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Barium | 0.56 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Iron | 0.58 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 77.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Manganese | 0.035 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |
| Zinc | 0.049 J | | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:21 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:28 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:28 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:34 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.021 | | 0.021 | 0.0070 | mg/Kg | ✱ | 11/03/17 15:15 | 11/06/17 11:39 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.0 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00096 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:03 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 17:03 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 17:03 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Benzo[a]anthracene | 0.011 | J | 0.038 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.022 | J | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Benzo[b]fluoranthene | 0.018 | J | 0.038 | 0.0082 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Chrysene | 0.012 | J | 0.038 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Fluoranthene | <0.038 | | 0.038 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.0099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Methylnaphthalene | 0.0085 | J | 0.077 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Phenanthrene | 0.017 | J | 0.038 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Pyrene | 0.013 | J | 0.038 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 69 | | 44 - 121 | | | | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2-Fluorophenol | 77 | | 46 - 133 | | | | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Nitrobenzene-d5 | 61 | | 41 - 120 | | | | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Phenol-d5 | 80 | | 46 - 125 | | | | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| Terphenyl-d14 | 81 | | 35 - 160 | | | | 11/08/17 17:13 | 11/09/17 13:51 | 1 |
| 2,4,6-Tribromophenol | 90 | | 25 - 139 | | | | 11/08/17 17:13 | 11/09/17 13:51 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:44 | 1 |
| Arsenic | 9.9 | | 0.60 | 0.20 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Barium | 92 | | 0.60 | 0.068 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Beryllium | 0.59 | | 0.24 | 0.056 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Cadmium | <0.12 | | 0.12 | 0.022 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Chromium | 16 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Cobalt | 7.7 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Copper | 8.0 | | 0.60 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Iron | 18000 | | 12 | 6.2 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Lead | 25 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Manganese | 670 | | 0.60 | 0.087 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Nickel | 9.0 | | 0.60 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Selenium | 1.4 | | 0.60 | 0.35 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:44 | 1 |
| Silver | <0.30 | | 0.30 | 0.077 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Thallium | <0.60 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Vanadium | 37 | | 0.30 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |
| Zinc | 32 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:23 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Barium | 0.42 | J | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Copper | 0.013 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Manganese | 0.21 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Nickel | 0.016 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |
| Zinc | 0.056 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:25 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.053 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:29 | 11/08/17 22:17 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:32 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:32 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:35 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.019 | J | 0.020 | 0.0065 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:53 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.2 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

Date Collected: 11/01/17 09:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00040 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Bromomethane | <0.0049 | | 0.0049 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 2-Butanone (MEK) | <0.0049 | | 0.0049 | 0.0022 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Carbon disulfide | <0.0049 | | 0.0049 | 0.0010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Chloroethane | <0.0049 | | 0.0049 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Chloromethane | <0.0049 | | 0.0049 | 0.0020 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,2-Dichloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00093 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 2-Hexanone | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Methylene Chloride | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0049 | | 0.0049 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Vinyl acetate | <0.0049 | | 0.0049 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 17:28 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 17:28 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Benzo[a]anthracene | 0.015 | J | 0.038 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

Date Collected: 11/01/17 09:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.023 | J | 0.038 | 0.0075 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Benzo[b]fluoranthene | 0.017 | J | 0.038 | 0.0083 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.043 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Chrysene | 0.016 | J | 0.038 | 0.011 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0075 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.092 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.059 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.076 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Fluoranthene | 0.018 | J | 0.038 | 0.0072 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0089 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.061 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.059 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.010 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Methylnaphthalene | 0.012 | J | 0.078 | 0.0071 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0059 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | * | 11/08/17 17:13 | 11/09/17 15:35 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

Date Collected: 11/01/17 09:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Phenanthrene | 0.036 | J | 0.038 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Phenol | <0.19 | | 0.19 | 0.086 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Pyrene | 0.024 | J | 0.038 | 0.0077 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 78 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2-Fluorophenol | 80 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Nitrobenzene-d5 | 69 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| Terphenyl-d14 | 84 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 15:35 | 1 |
| 2,4,6-Tribromophenol | 96 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 15:35 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:48 | 1 |
| Arsenic | 6.0 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Barium | 100 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Beryllium | 0.61 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Cadmium | 0.035 | J B | 0.11 | 0.020 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Chromium | 15 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Cobalt | 6.8 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Copper | 9.9 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Iron | 15000 | | 11 | 5.8 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Lead | 32 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Manganese | 490 | | 0.56 | 0.081 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Nickel | 11 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Selenium | 0.99 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:48 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Thallium | <0.56 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Vanadium | 28 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |
| Zinc | 48 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:26 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Barium | 0.71 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

Date Collected: 11/01/17 09:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 84.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Manganese | 0.048 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Nickel | 0.013 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |
| Zinc | 0.074 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:29 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:37 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:37 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:37 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.035 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:55 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.7 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00038 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0020 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00096 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00088 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 17:53 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 17:53 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 17:53 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Benzo[a]anthracene | 0.022 | J | 0.039 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.029 | J | 0.039 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Benzo[b]fluoranthene | 0.031 | J | 0.039 | 0.0085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Chrysene | 0.024 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.69 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Fluoranthene | 0.031 | J | 0.039 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Methylnaphthalene | 0.026 | J | 0.080 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Naphthalene | 0.0075 | J | 0.039 | 0.0061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0098 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.63 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Phenanthrene | 0.054 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Pyrene | 0.031 | J | 0.039 | 0.0078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 16:02 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 73 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2-Fluorophenol | 72 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Nitrobenzene-d5 | 64 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Phenol-d5 | 86 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| Terphenyl-d14 | 88 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 16:02 | 1 |
| 2,4,6-Tribromophenol | 94 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 16:02 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:51 | 1 |
| Arsenic | 7.2 | | 0.59 | 0.20 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Barium | 120 | | 0.59 | 0.068 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Beryllium | 0.47 | | 0.24 | 0.055 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Cadmium | 0.048 | J B | 0.12 | 0.021 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Chromium | 14 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Cobalt | 7.9 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Copper | 9.8 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Iron | 15000 | | 12 | 6.2 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Lead | 31 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Manganese | 720 | | 0.59 | 0.086 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Nickel | 9.4 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Selenium | 1.1 | | 0.59 | 0.35 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:51 | 1 |
| Silver | <0.30 | | 0.30 | 0.076 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Thallium | <0.59 | | 0.59 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Vanadium | 27 | | 0.30 | 0.070 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |
| Zinc | 40 | | 1.2 | 0.52 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:30 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Barium | 0.64 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Iron | 0.39 | J | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Manganese | 0.037 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |
| Zinc | 0.071 J | | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:40 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:41 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:41 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:38 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.20 | | 0.020 | 0.0067 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 11:57 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.0 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

Date Collected: 11/01/17 10:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 78.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.00099 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00070 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00091 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 18:18 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 18:18 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.042 | | 0.042 | 0.0076 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Acenaphthylene | <0.042 | | 0.042 | 0.0056 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Anthracene | 0.0075 | J | 0.042 | 0.0070 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Benzo[a]anthracene | 0.025 | J | 0.042 | 0.0057 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

Date Collected: 11/01/17 10:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.035 | J | 0.042 | 0.0082 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Benzo[b]fluoranthene | 0.035 | J | 0.042 | 0.0091 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Benzo[g,h,i]perylene | 0.014 | J | 0.042 | 0.014 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Benzo[k]fluoranthene | 0.013 | J | 0.042 | 0.012 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.043 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.077 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.080 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.11 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 4-Chloroaniline | <0.85 | | 0.85 | 0.20 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 4-Chloro-3-methylphenol | <0.42 | | 0.42 | 0.14 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.072 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Chrysene | 0.028 | J | 0.042 | 0.011 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Dibenz(a,h)anthracene | <0.042 | | 0.042 | 0.0081 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.059 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4-Dichlorophenol | <0.42 | | 0.42 | 0.10 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4-Dimethylphenol | <0.42 | | 0.42 | 0.16 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.85 | | 0.85 | 0.34 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4-Dinitrophenol | <0.85 | | 0.85 | 0.74 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.083 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Fluoranthene | 0.048 | | 0.042 | 0.0078 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Fluorene | <0.042 | | 0.042 | 0.0059 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Hexachlorobenzene | <0.085 | | 0.085 | 0.0098 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Hexachlorocyclopentadiene | <0.85 | | 0.85 | 0.24 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.012 | J | 0.042 | 0.011 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Methylnaphthalene | 0.018 | J | 0.085 | 0.0078 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Naphthalene | 0.0070 | J | 0.042 | 0.0065 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.057 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 3-Nitroaniline | <0.42 | | 0.42 | 0.13 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 4-Nitroaniline | <0.42 | | 0.42 | 0.18 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Nitrobenzene | <0.042 | | 0.042 | 0.011 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Nitrophenol | <0.42 | | 0.42 | 0.10 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

Date Collected: 11/01/17 10:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.85 | | 0.85 | 0.40 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| N-Nitrosodi-n-propylamine | <0.085 | | 0.085 | 0.052 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Pentachlorophenol | <0.85 | | 0.85 | 0.68 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Phenanthrene | 0.052 | | 0.042 | 0.0059 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Phenol | <0.21 | | 0.21 | 0.094 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Pyrene | 0.039 J | | 0.042 | 0.0084 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4,5-Trichlorophenol | <0.42 | | 0.42 | 0.096 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4,6-Trichlorophenol | <0.42 | | 0.42 | 0.14 | mg/Kg | ☼ | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 74 | | 44 - 121 | | | | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2-Fluorophenol | 81 | | 46 - 133 | | | | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Nitrobenzene-d5 | 69 | | 41 - 120 | | | | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Phenol-d5 | 79 | | 46 - 125 | | | | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| Terphenyl-d14 | 70 | | 35 - 160 | | | | 11/13/17 18:14 | 11/14/17 12:23 | 1 |
| 2,4,6-Tribromophenol | 73 | | 25 - 139 | | | | 11/13/17 18:14 | 11/14/17 12:23 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.20 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:55 | 1 |
| Arsenic | 5.4 | | 0.52 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Barium | 89 | | 0.52 | 0.059 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Beryllium | 0.44 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Cadmium | <0.10 | | 0.10 | 0.019 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Chromium | 12 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Cobalt | 8.4 | | 0.26 | 0.068 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Copper | 7.6 | | 0.52 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Iron | 11000 | | 10 | 5.4 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Lead | 19 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Manganese | 670 | | 0.52 | 0.075 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Nickel | 7.4 | | 0.52 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Selenium | 0.61 | | 0.52 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:55 | 1 |
| Silver | <0.26 | | 0.26 | 0.067 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Thallium | <0.52 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Vanadium | 22 | | 0.26 | 0.061 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |
| Zinc | 28 | | 1.0 | 0.45 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:34 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Barium | 0.43 J | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Copper | 0.011 J | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Iron | 0.28 J | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

Date Collected: 11/01/17 10:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 78.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Manganese | 0.033 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |
| Zinc | 0.041 J | | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:44 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:46 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:46 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:40 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.032 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 12:00 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.9 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.0010 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00050 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 18:43 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 18:43 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 18:43 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Benzo[a]anthracene | 0.011 | J | 0.039 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.019 | J | 0.039 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Benzo[b]fluoranthene | 0.010 | J | 0.039 | 0.0085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Chrysene | 0.011 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Fluoranthene | 0.012 | J | 0.039 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Methylnaphthalene | 0.012 | J | 0.080 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.63 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Phenanthrene | 0.026 | J | 0.039 | 0.0055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Pyrene | 0.014 | J | 0.039 | 0.0079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 67 | | 44 - 121 | | | | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2-Fluorophenol | 66 | | 46 - 133 | | | | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Nitrobenzene-d5 | 59 | | 41 - 120 | | | | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Phenol-d5 | 77 | | 46 - 125 | | | | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| Terphenyl-d14 | 83 | | 35 - 160 | | | | 11/08/17 17:13 | 11/09/17 14:43 | 1 |
| 2,4,6-Tribromophenol | 80 | | 25 - 139 | | | | 11/08/17 17:13 | 11/09/17 14:43 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.20 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:59 | 1 |
| Arsenic | 3.8 | | 0.51 | 0.17 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Barium | 97 | | 0.51 | 0.058 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Beryllium | 0.47 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Cadmium | 0.058 | J B | 0.10 | 0.018 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Chromium | 12 | | 0.51 | 0.25 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Cobalt | 4.5 | | 0.26 | 0.067 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Copper | 9.2 | | 0.51 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Iron | 10000 | | 10 | 5.3 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Lead | 21 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Manganese | 250 | | 0.51 | 0.074 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Nickel | 9.6 | | 0.51 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Selenium | 0.66 | | 0.51 | 0.30 | mg/Kg | ☼ | 11/03/17 07:41 | 11/05/17 23:59 | 1 |
| Silver | <0.26 | | 0.26 | 0.066 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Thallium | <0.51 | | 0.51 | 0.26 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Vanadium | 21 | | 0.26 | 0.060 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |
| Zinc | 36 | | 1.0 | 0.45 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:38 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Barium | 0.51 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Iron | 0.88 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Manganese | 0.033 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |
| Zinc | 0.051 J | | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 12:49 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:51 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:51 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:44 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.026 | | 0.018 | 0.0060 | mg/Kg | ✱ | 11/03/17 15:15 | 11/06/17 12:02 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.6 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0082 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00097 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00090 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:08 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 96 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 19:08 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 19:08 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Benzo[a]anthracene | 0.0068 | J | 0.038 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.018 | J | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Benzo[b]fluoranthene | <0.038 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Benzo[g,h,i]perylene | <0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Chrysene | <0.038 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Fluoranthene | 0.0085 | J | 0.038 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0089 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.038 | | 0.038 | 0.0099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Methylnaphthalene | <0.077 | | 0.077 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Naphthalene | <0.038 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Phenanthrene | 0.012 | J | 0.038 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Pyrene | 0.0086 | J | 0.038 | 0.0076 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 15:09 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 72 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2-Fluorophenol | 75 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Nitrobenzene-d5 | 64 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Phenol-d5 | 86 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| Terphenyl-d14 | 79 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 15:09 | 1 |
| 2,4,6-Tribromophenol | 89 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 15:09 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/06/17 00:11 | 1 |
| Arsenic | 5.1 | | 0.53 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Barium | 58 | | 0.53 | 0.060 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Beryllium | 0.37 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.019 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Chromium | 12 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Cobalt | 4.9 | | 0.26 | 0.069 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Copper | 5.9 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Iron | 12000 | | 11 | 5.5 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Lead | 15 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Manganese | 370 | | 0.53 | 0.077 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Nickel | 6.6 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Selenium | 1.0 | | 0.53 | 0.31 | mg/Kg | ☼ | 11/03/17 07:41 | 11/06/17 00:11 | 1 |
| Silver | <0.26 | | 0.26 | 0.068 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Thallium | <0.53 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Vanadium | 23 | | 0.26 | 0.063 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |
| Zinc | 26 | | 1.1 | 0.47 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:51 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Barium | 0.42 | J | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Copper | 0.016 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Manganese | 0.10 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Nickel | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |
| Zinc | 0.060 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:08 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 16:55 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 16:55 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:45 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.027 | | 0.018 | 0.0060 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 12:04 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.5 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

Date Collected: 11/01/17 11:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.015 | | 0.015 | 0.0067 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Benzene | <0.0015 | | 0.0015 | 0.00039 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Bromodichloromethane | <0.0015 | | 0.0015 | 0.00031 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Bromoform | <0.0015 | | 0.0015 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Bromomethane | <0.0038 | | 0.0038 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 2-Butanone (MEK) | <0.0038 | | 0.0038 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Carbon disulfide | <0.0038 | | 0.0038 | 0.00080 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Carbon tetrachloride | <0.0015 | | 0.0015 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Chlorobenzene | <0.0015 | | 0.0015 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Chloroethane | <0.0038 | | 0.0038 | 0.0011 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Chloroform | <0.0015 | | 0.0015 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Chloromethane | <0.0038 | | 0.0038 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| cis-1,2-Dichloroethene | <0.0015 | | 0.0015 | 0.00043 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| cis-1,3-Dichloropropene | <0.0015 | | 0.0015 | 0.00046 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Dibromochloromethane | <0.0015 | | 0.0015 | 0.00050 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,1-Dichloroethane | <0.0015 | | 0.0015 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,2-Dichloroethane | <0.0038 | | 0.0038 | 0.0012 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,1-Dichloroethene | <0.0015 | | 0.0015 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,2-Dichloropropane | <0.0015 | | 0.0015 | 0.00040 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,3-Dichloropropane, Total | <0.0015 | | 0.0015 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Ethylbenzene | <0.0015 | | 0.0015 | 0.00073 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 2-Hexanone | <0.0038 | | 0.0038 | 0.0012 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Methylene Chloride | <0.0038 | | 0.0038 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0038 | | 0.0038 | 0.0011 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Methyl tert-butyl ether | <0.0015 | | 0.0015 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Styrene | <0.0015 | | 0.0015 | 0.00046 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0015 | | 0.0015 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Tetrachloroethene | <0.0015 | | 0.0015 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Toluene | <0.0015 | | 0.0015 | 0.00039 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| trans-1,2-Dichloroethene | <0.0015 | | 0.0015 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| trans-1,3-Dichloropropene | <0.0015 | | 0.0015 | 0.00054 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,1,1-Trichloroethane | <0.0015 | | 0.0015 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,1,2-Trichloroethane | <0.0015 | | 0.0015 | 0.00066 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Trichloroethene | <0.0015 | | 0.0015 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Vinyl acetate | <0.0038 | | 0.0038 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Vinyl chloride | <0.0015 | | 0.0015 | 0.00068 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Xylenes, Total | <0.0031 | | 0.0031 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:33 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Dibromofluoromethane | 101 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 19:33 | 1 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 19:33 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.036 | | 0.036 | 0.0066 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Acenaphthylene | <0.036 | | 0.036 | 0.0048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Anthracene | <0.036 | | 0.036 | 0.0061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Benzo[a]anthracene | 0.031 | J | 0.036 | 0.0049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

Date Collected: 11/01/17 11:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 90.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.040 | | 0.036 | 0.0071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Benzo[b]fluoranthene | 0.053 | | 0.036 | 0.0079 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Benzo[g,h,i]perylene | 0.012 | J | 0.036 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Benzo[k]fluoranthene | 0.019 | J | 0.036 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Bis(2-chloroethoxy)methane | <0.18 | | 0.18 | 0.037 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Bis(2-chloroethyl)ether | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.18 | | 0.18 | 0.067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 4-Bromophenyl phenyl ether | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Butyl benzyl phthalate | <0.18 | | 0.18 | 0.069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Carbazole | <0.18 | | 0.18 | 0.091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 4-Chloroaniline | <0.74 | | 0.74 | 0.17 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 4-Chloro-3-methylphenol | <0.36 | | 0.36 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Chloronaphthalene | <0.18 | | 0.18 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Chlorophenol | <0.18 | | 0.18 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 4-Chlorophenyl phenyl ether | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Chrysene | 0.047 | | 0.036 | 0.0099 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Dibenz(a,h)anthracene | <0.036 | | 0.036 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Dibenzofuran | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 1,2-Dichlorobenzene | <0.18 | | 0.18 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 1,3-Dichlorobenzene | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 1,4-Dichlorobenzene | <0.18 | | 0.18 | 0.047 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 3,3'-Dichlorobenzidine | <0.18 | | 0.18 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4-Dichlorophenol | <0.36 | | 0.36 | 0.087 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Diethyl phthalate | <0.18 | | 0.18 | 0.062 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4-Dimethylphenol | <0.36 | | 0.36 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Dimethyl phthalate | <0.18 | | 0.18 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Di-n-butyl phthalate | <0.18 | | 0.18 | 0.056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.74 | | 0.74 | 0.29 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4-Dinitrophenol | <0.74 | | 0.74 | 0.64 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4-Dinitrotoluene | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,6-Dinitrotoluene | <0.18 | | 0.18 | 0.072 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Di-n-octyl phthalate | <0.18 | | 0.18 | 0.059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Fluoranthene | 0.038 | | 0.036 | 0.0068 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Fluorene | <0.036 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Hexachlorobenzene | <0.074 | | 0.074 | 0.0084 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Hexachlorobutadiene | <0.18 | | 0.18 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Hexachlorocyclopentadiene | <0.74 | | 0.74 | 0.21 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Hexachloroethane | <0.18 | | 0.18 | 0.055 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.011 | J | 0.036 | 0.0094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Isophorone | <0.18 | | 0.18 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Methylnaphthalene | 0.018 | J | 0.074 | 0.0067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Methylphenol | <0.18 | | 0.18 | 0.058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 3 & 4 Methylphenol | <0.18 | | 0.18 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Naphthalene | 0.0080 | J | 0.036 | 0.0056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Nitroaniline | <0.18 | | 0.18 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 3-Nitroaniline | <0.36 | | 0.36 | 0.11 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 4-Nitroaniline | <0.36 | | 0.36 | 0.15 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Nitrobenzene | <0.036 | | 0.036 | 0.0091 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Nitrophenol | <0.36 | | 0.36 | 0.086 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

Date Collected: 11/01/17 11:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 90.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.74 | | 0.74 | 0.35 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| N-Nitrosodi-n-propylamine | <0.074 | | 0.074 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| N-Nitrosodiphenylamine | <0.18 | | 0.18 | 0.043 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.18 | | 0.18 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Pentachlorophenol | <0.74 | | 0.74 | 0.58 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Phenanthrene | 0.046 | | 0.036 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Phenol | <0.18 | | 0.18 | 0.081 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Pyrene | 0.040 | | 0.036 | 0.0072 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 1,2,4-Trichlorobenzene | <0.18 | | 0.18 | 0.039 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4,5-Trichlorophenol | <0.36 | | 0.36 | 0.083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4,6-Trichlorophenol | <0.36 | | 0.36 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 60 | | 44 - 121 | | | | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2-Fluorophenol | 58 | | 46 - 133 | | | | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Nitrobenzene-d5 | 50 | | 41 - 120 | | | | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Phenol-d5 | 70 | | 46 - 125 | | | | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| Terphenyl-d14 | 80 | | 35 - 160 | | | | 11/08/17 17:13 | 11/09/17 17:46 | 1 |
| 2,4,6-Tribromophenol | 78 | | 25 - 139 | | | | 11/08/17 17:13 | 11/09/17 17:46 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.24 | J | 1.1 | 0.21 | mg/Kg | ☼ | 11/03/17 07:41 | 11/06/17 00:15 | 1 |
| Arsenic | 3.8 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Barium | 29 | | 0.55 | 0.062 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Beryllium | 0.29 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Cadmium | 0.61 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Chromium | 9.2 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Cobalt | 2.5 | | 0.27 | 0.072 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Copper | 14 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Iron | 9700 | | 11 | 5.7 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Lead | 210 | | 0.27 | 0.13 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Manganese | 170 | | 0.55 | 0.079 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Nickel | 9.7 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Selenium | 0.45 | J | 0.55 | 0.32 | mg/Kg | ☼ | 11/03/17 07:41 | 11/06/17 00:15 | 1 |
| Silver | <0.27 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Thallium | <0.55 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Vanadium | 9.8 | | 0.27 | 0.065 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |
| Zinc | 75 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:55 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Barium | 0.45 | J | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Cadmium | 0.0028 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Copper | 0.019 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Iron | 0.29 | J | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

Date Collected: 11/01/17 11:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 90.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Manganese | 0.17 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |
| Zinc | 0.052 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:12 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.019 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:29 | 11/08/17 22:21 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 17:00 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 17:00 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:47 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.037 | | 0.017 | 0.0058 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 12:07 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.7 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0076 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00036 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Bromomethane | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 2-Butanone (MEK) | <0.0044 | | 0.0044 | 0.0019 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Carbon disulfide | <0.0044 | | 0.0044 | 0.00091 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00065 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Chloroethane | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Chloromethane | <0.0044 | | 0.0044 | 0.0018 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00049 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00057 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,2-Dichloroethane | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00045 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00084 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 2-Hexanone | <0.0044 | | 0.0044 | 0.0014 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Methylene Chloride | <0.0044 | | 0.0044 | 0.0017 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0044 | | 0.0044 | 0.0013 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00044 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00075 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Vinyl acetate | <0.0044 | | 0.0044 | 0.0015 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00078 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Xylenes, Total | <0.0035 | | 0.0035 | 0.00056 | mg/Kg | ☼ | 11/02/17 18:18 | 11/08/17 19:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Dibromofluoromethane | 98 | | 75 - 126 | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 134 | 11/02/17 18:18 | 11/08/17 19:59 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/02/17 18:18 | 11/08/17 19:59 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.037 | | 0.037 | 0.0067 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Acenaphthylene | <0.037 | | 0.037 | 0.0050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Anthracene | 0.033 | J | 0.037 | 0.0063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Benzo[a]anthracene | 0.088 | | 0.037 | 0.0051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.086 | | 0.037 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Benzo[b]fluoranthene | 0.090 | | 0.037 | 0.0081 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Benzo[g,h,i]perylene | 0.058 | | 0.037 | 0.012 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Benzo[k]fluoranthene | 0.044 | | 0.037 | 0.011 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.038 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.056 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.071 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 4-Chloroaniline | <0.76 | | 0.76 | 0.18 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 4-Chloro-3-methylphenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Chrysene | 0.11 | | 0.037 | 0.010 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Dibenz(a,h)anthracene | <0.037 | | 0.037 | 0.0073 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Dibenzofuran | 0.069 | J | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.048 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4-Dichlorophenol | <0.37 | | 0.37 | 0.089 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4-Dimethylphenol | <0.37 | | 0.37 | 0.14 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.76 | | 0.76 | 0.30 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4-Dinitrophenol | <0.76 | | 0.76 | 0.66 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Fluoranthene | 0.11 | | 0.037 | 0.0070 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Fluorene | <0.037 | | 0.037 | 0.0053 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Hexachlorobenzene | <0.076 | | 0.076 | 0.0087 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Hexachlorocyclopentadiene | <0.76 | | 0.76 | 0.22 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.035 | J | 0.037 | 0.0097 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Methylnaphthalene | 0.12 | | 0.076 | 0.0069 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Naphthalene | 0.049 | | 0.037 | 0.0058 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 3-Nitroaniline | <0.37 | | 0.37 | 0.12 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 4-Nitroaniline | <0.37 | | 0.37 | 0.16 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Nitrobenzene | <0.037 | | 0.037 | 0.0094 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Nitrophenol | <0.37 | | 0.37 | 0.089 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.76 | | 0.76 | 0.36 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| N-Nitrosodi-n-propylamine | <0.076 | | 0.076 | 0.046 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Pentachlorophenol | <0.76 | | 0.76 | 0.60 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Phenanthrene | 0.24 | | 0.037 | 0.0052 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Phenol | <0.19 | | 0.19 | 0.083 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Pyrene | 0.15 | | 0.037 | 0.0075 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.040 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4,5-Trichlorophenol | <0.37 | | 0.37 | 0.086 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4,6-Trichlorophenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 75 | | 44 - 121 | | | | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2-Fluorophenol | 77 | | 46 - 133 | | | | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | | | | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Phenol-d5 | 71 | | 46 - 125 | | | | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| Terphenyl-d14 | 88 | | 35 - 160 | | | | 11/08/17 17:13 | 11/13/17 15:12 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | | | | 11/08/17 17:13 | 11/13/17 15:12 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|-------|---|----------------|----------------|---------|
| Antimony | <0.95 | | 0.95 | 0.18 | mg/Kg | ☼ | 11/03/17 07:41 | 11/06/17 00:19 | 1 |
| Arsenic | 7.0 | | 0.47 | 0.16 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Barium | 77 | | 0.47 | 0.054 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Beryllium | 0.53 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Cadmium | 0.18 | B | 0.095 | 0.017 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Chromium | 12 | | 0.47 | 0.23 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Cobalt | 8.3 | | 0.24 | 0.062 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Copper | 11 | | 0.47 | 0.13 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Iron | 15000 | | 9.5 | 4.9 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Lead | 86 | | 0.24 | 0.11 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Manganese | 900 | | 0.47 | 0.069 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Nickel | 11 | | 0.47 | 0.14 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Selenium | 0.81 | | 0.47 | 0.28 | mg/Kg | ☼ | 11/03/17 07:41 | 11/06/17 00:19 | 1 |
| Silver | 0.080 | J | 0.24 | 0.061 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Thallium | <0.47 | | 0.47 | 0.24 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Vanadium | 24 | | 0.24 | 0.056 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |
| Zinc | 55 | | 0.95 | 0.42 | mg/Kg | ☼ | 11/03/17 07:41 | 11/03/17 17:59 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Barium | 0.72 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Cadmium | 0.0026 | J | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Copper | 0.018 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Iron | 0.20 | J | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Manganese | 0.031 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Nickel | 0.010 | J | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |
| Zinc | 0.057 | J | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 13:16 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 17:14 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 17:14 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:48 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.035 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/03/17 15:15 | 11/06/17 12:09 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.6 | | 0.20 | 0.20 | SU | | | 11/08/17 17:14 | 1 |

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Qualifiers

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| X | Surrogate is outside control limits |

GC Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Metals

| Qualifier | Qualifier Description |
|-----------|--|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F5 | Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. |
| F3 | Duplicate RPD exceeds the control limit |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| B | Compound was found in the blank and sample. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

GC/MS VOA

Prep Batch: 408513

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 5035 | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 5035 | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 5035 | |

Analysis Batch: 408943

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 8260B | 408513 |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 8260B | 408513 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 8260B | 408513 |
| MB 500-408943/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408943/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 500-408943/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

GC/MS Semi VOA

Prep Batch: 409105

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 3541 | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 3541 | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 3541 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

GC/MS Semi VOA (Continued)

Prep Batch: 409105 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 3541 | |
| MB 500-409105/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-409105/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| 500-136651-2 MS | 3160-55-2 (0-3) | Total/NA | Solid | 3541 | |
| 500-136651-2 MSD | 3160-55-2 (0-3) | Total/NA | Solid | 3541 | |

Analysis Batch: 409157

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 8270D | 409105 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| MB 500-409105/1-A | Method Blank | Total/NA | Solid | 8270D | 409105 |
| LCS 500-409105/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 409105 |
| 500-136651-2 MS | 3160-55-2 (0-3) | Total/NA | Solid | 8270D | 409105 |
| 500-136651-2 MSD | 3160-55-2 (0-3) | Total/NA | Solid | 8270D | 409105 |

Analysis Batch: 409487

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 8270D | 409105 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 8270D | 409105 |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 8270D | 409105 |

Analysis Batch: 409657

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 8270D | 409105 |

Prep Batch: 409783

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 3541 | |
| MB 500-409783/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-409783/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

GC/MS Semi VOA (Continued)

Analysis Batch: 409829

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 8270D | 409783 |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 8270D | 409783 |
| MB 500-409783/1-A | Method Blank | Total/NA | Solid | 8270D | 409783 |
| LCS 500-409783/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 409783 |

GC Semi VOA

Prep Batch: 408939

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 3541 | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 3541 | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 3541 | |
| MB 500-408939/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-408939/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| LCS 500-408939/3-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Analysis Batch: 409021

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 8151A | 409129 |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 8151A | 409129 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 8151A | 409129 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 8151A | 409129 |
| MB 500-409129/1-A | Method Blank | Total/NA | Solid | 8151A | 409129 |
| LCS 500-409129/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 409129 |

Analysis Batch: 409066

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 8081B | 408939 |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 8081B | 408939 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 8081B | 408939 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 8081B | 408939 |
| MB 500-408939/1-A | Method Blank | Total/NA | Solid | 8081B | 408939 |
| LCS 500-408939/2-A | Lab Control Sample | Total/NA | Solid | 8081B | 408939 |

Prep Batch: 409129

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 8151A | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 8151A | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 8151A | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 8151A | |
| MB 500-409129/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 500-409129/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |

Analysis Batch: 409181

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 8082A | 408939 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

GC Semi VOA (Continued)

Analysis Batch: 409181 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 8082A | 408939 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 8082A | 408939 |
| MB 500-408939/1-A | Method Blank | Total/NA | Solid | 8082A | 408939 |
| LCS 500-408939/3-A | Lab Control Sample | Total/NA | Solid | 8082A | 408939 |

Metals

Prep Batch: 408293

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 3050B | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 3050B | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 3050B | |
| MB 500-408293/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408293/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-136651-1 MS | 3160-55-1 (0-3) | Total/NA | Solid | 3050B | |
| 500-136651-1 MSD | 3160-55-1 (0-3) | Total/NA | Solid | 3050B | |
| 500-136651-1 DU | 3160-55-1 (0-3) | Total/NA | Solid | 3050B | |

Leach Batch: 408390

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-3 | 3160-56-1 (0-1.5') | SPLP East | Solid | 1312 | |
| 500-136651-5 | 3160-64-1 (0-1.5') | SPLP East | Solid | 1312 | |
| 500-136651-7 | 3160-64-3 (0-1.5') | SPLP East | Solid | 1312 | |
| 500-136651-10 | 3160-62-8 (0-1.5') | SPLP East | Solid | 1312 | |
| 500-136651-16 | 3160-62-2 (0-1.5') | SPLP East | Solid | 1312 | |
| LB 500-408390/1-B | Method Blank | SPLP East | Solid | 1312 | |

Leach Batch: 408395

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | TCLP | Solid | 1311 | |
| 500-136651-2 | 3160-55-2 (0-3) | TCLP | Solid | 1311 | |
| 500-136651-3 | 3160-56-1 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-4 | 3160-56-2 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-5 | 3160-64-1 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-6 | 3160-64-2 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-7 | 3160-64-3 (0-1.5') | TCLP | Solid | 1311 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Metals (Continued)

Leach Batch: 408395 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-8 | 3160-62-10 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-9 | 3160-62-9 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-10 | 3160-62-8 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-11 | 3160-62-7 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-12 | 3160-62-6 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-13 | 3160-62-5 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-14 | 3160-62-4 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-15 | 3160-62-3 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-16 | 3160-62-2 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-17 | 3160-62-1 (0-1.5') | TCLP | Solid | 1311 | |
| LB 500-408395/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 500-408395/1-C | Method Blank | TCLP | Solid | 1311 | |
| 500-136651-1 MS | 3160-55-1 (0-3) | TCLP | Solid | 1311 | |
| 500-136651-17 MS | 3160-62-1 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136651-1 DU | 3160-55-1 (0-3) | TCLP | Solid | 1311 | |
| 500-136651-17 DU | 3160-62-1 (0-1.5') | TCLP | Solid | 1311 | |

Prep Batch: 408396

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 7471B | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 7471B | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 7471B | |
| MB 500-408396/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-408396/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-136651-9 MS | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-9 MSD | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136651-9 DU | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | |

Analysis Batch: 408472

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 6010B | 408293 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Metals (Continued)

Analysis Batch: 408472 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| MB 500-408293/1-A | Method Blank | Total/NA | Solid | 6010B | 408293 |
| LCS 500-408293/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408293 |
| 500-136651-1 MS | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-1 MSD | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-1 DU | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |

Analysis Batch: 408545

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 6010B | 408293 |
| MB 500-408293/1-A | Method Blank | Total/NA | Solid | 6010B | 408293 |
| LCS 500-408293/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408293 |
| 500-136651-1 MS | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-1 MSD | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |
| 500-136651-1 DU | 3160-55-1 (0-3) | Total/NA | Solid | 6010B | 408293 |

Prep Batch: 408611

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-3 | 3160-56-1 (0-1.5') | SPLP East | Solid | 3010A | 408390 |
| 500-136651-5 | 3160-64-1 (0-1.5') | SPLP East | Solid | 3010A | 408390 |
| 500-136651-7 | 3160-64-3 (0-1.5') | SPLP East | Solid | 3010A | 408390 |
| 500-136651-10 | 3160-62-8 (0-1.5') | SPLP East | Solid | 3010A | 408390 |
| 500-136651-16 | 3160-62-2 (0-1.5') | SPLP East | Solid | 3010A | 408390 |
| LB 500-408390/1-B | Method Blank | SPLP East | Solid | 3010A | 408390 |
| LCS 500-408611/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Metals (Continued)

Prep Batch: 408617

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | TCLP | Solid | 3010A | 408395 |
| 500-136651-2 | 3160-55-2 (0-3) | TCLP | Solid | 3010A | 408395 |
| 500-136651-3 | 3160-56-1 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-4 | 3160-56-2 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-5 | 3160-64-1 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-6 | 3160-64-2 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-7 | 3160-64-3 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-8 | 3160-62-10 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-9 | 3160-62-9 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-10 | 3160-62-8 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-11 | 3160-62-7 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-12 | 3160-62-6 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-13 | 3160-62-5 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-14 | 3160-62-4 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-15 | 3160-62-3 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-16 | 3160-62-2 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-17 | 3160-62-1 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| LB 500-408395/1-B | Method Blank | TCLP | Solid | 3010A | 408395 |
| LCS 500-408617/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| 500-136651-17 MS | 3160-62-1 (0-1.5') | TCLP | Solid | 3010A | 408395 |
| 500-136651-17 DU | 3160-62-1 (0-1.5') | TCLP | Solid | 3010A | 408395 |

Analysis Batch: 408625

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 7471B | 408396 |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 7471B | 408396 |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| MB 500-408396/12-A | Method Blank | Total/NA | Solid | 7471B | 408396 |
| LCS 500-408396/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 408396 |
| 500-136651-9 MS | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-9 MSD | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | 408396 |
| 500-136651-9 DU | 3160-62-9 (0-1.5') | Total/NA | Solid | 7471B | 408396 |

Prep Batch: 408635

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | TCLP | Solid | 7470A | 408395 |
| 500-136651-2 | 3160-55-2 (0-3) | TCLP | Solid | 7470A | 408395 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Metals (Continued)

Prep Batch: 408635 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-3 | 3160-56-1 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-4 | 3160-56-2 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-5 | 3160-64-1 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-6 | 3160-64-2 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-7 | 3160-64-3 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-8 | 3160-62-10 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-9 | 3160-62-9 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-10 | 3160-62-8 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-11 | 3160-62-7 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-12 | 3160-62-6 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-13 | 3160-62-5 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-14 | 3160-62-4 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-15 | 3160-62-3 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-16 | 3160-62-2 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| 500-136651-17 | 3160-62-1 (0-1.5') | TCLP | Solid | 7470A | 408395 |
| LB 500-408395/1-C | Method Blank | TCLP | Solid | 7470A | 408395 |
| MB 500-408635/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-408635/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-136651-1 MS | 3160-55-1 (0-3) | TCLP | Solid | 7470A | 408395 |
| 500-136651-1 DU | 3160-55-1 (0-3) | TCLP | Solid | 7470A | 408395 |

Analysis Batch: 408771

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | TCLP | Solid | 7470A | 408635 |
| 500-136651-2 | 3160-55-2 (0-3) | TCLP | Solid | 7470A | 408635 |
| 500-136651-3 | 3160-56-1 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-4 | 3160-56-2 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-5 | 3160-64-1 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-6 | 3160-64-2 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-7 | 3160-64-3 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-8 | 3160-62-10 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-9 | 3160-62-9 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-10 | 3160-62-8 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-11 | 3160-62-7 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-12 | 3160-62-6 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-13 | 3160-62-5 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-14 | 3160-62-4 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-15 | 3160-62-3 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-16 | 3160-62-2 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| 500-136651-17 | 3160-62-1 (0-1.5') | TCLP | Solid | 7470A | 408635 |
| LB 500-408395/1-C | Method Blank | TCLP | Solid | 7470A | 408635 |
| MB 500-408635/12-A | Method Blank | Total/NA | Solid | 7470A | 408635 |
| LCS 500-408635/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 408635 |
| 500-136651-1 MS | 3160-55-1 (0-3) | TCLP | Solid | 7470A | 408635 |
| 500-136651-1 DU | 3160-55-1 (0-3) | TCLP | Solid | 7470A | 408635 |

Analysis Batch: 408949

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | TCLP | Solid | 6010B | 408617 |
| 500-136651-2 | 3160-55-2 (0-3) | TCLP | Solid | 6010B | 408617 |
| 500-136651-3 | 3160-56-1 (0-1.5') | TCLP | Solid | 6010B | 408617 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Metals (Continued)

Analysis Batch: 408949 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-4 | 3160-56-2 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-5 | 3160-64-1 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-6 | 3160-64-2 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-7 | 3160-64-3 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-8 | 3160-62-10 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-9 | 3160-62-9 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-10 | 3160-62-8 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-11 | 3160-62-7 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-12 | 3160-62-6 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-13 | 3160-62-5 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-14 | 3160-62-4 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-15 | 3160-62-3 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-16 | 3160-62-2 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-17 | 3160-62-1 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| LB 500-408395/1-B | Method Blank | TCLP | Solid | 6010B | 408617 |
| LCS 500-408617/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408617 |
| 500-136651-17 MS | 3160-62-1 (0-1.5') | TCLP | Solid | 6010B | 408617 |
| 500-136651-17 DU | 3160-62-1 (0-1.5') | TCLP | Solid | 6010B | 408617 |

Analysis Batch: 408965

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | TCLP | Solid | 6020A | 408617 |
| 500-136651-2 | 3160-55-2 (0-3) | TCLP | Solid | 6020A | 408617 |
| 500-136651-3 | 3160-56-1 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-4 | 3160-56-2 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-5 | 3160-64-1 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-6 | 3160-64-2 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-7 | 3160-64-3 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-8 | 3160-62-10 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-9 | 3160-62-9 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-10 | 3160-62-8 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-11 | 3160-62-7 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-12 | 3160-62-6 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-13 | 3160-62-5 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-14 | 3160-62-4 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-15 | 3160-62-3 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-16 | 3160-62-2 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-17 | 3160-62-1 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| LB 500-408395/1-B | Method Blank | TCLP | Solid | 6020A | 408617 |
| LCS 500-408617/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 408617 |
| 500-136651-17 MS | 3160-62-1 (0-1.5') | TCLP | Solid | 6020A | 408617 |
| 500-136651-17 DU | 3160-62-1 (0-1.5') | TCLP | Solid | 6020A | 408617 |

Analysis Batch: 409155

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136651-3 | 3160-56-1 (0-1.5') | SPLP East | Solid | 6010B | 408611 |
| 500-136651-5 | 3160-64-1 (0-1.5') | SPLP East | Solid | 6010B | 408611 |
| 500-136651-7 | 3160-64-3 (0-1.5') | SPLP East | Solid | 6010B | 408611 |
| 500-136651-10 | 3160-62-8 (0-1.5') | SPLP East | Solid | 6010B | 408611 |
| 500-136651-16 | 3160-62-2 (0-1.5') | SPLP East | Solid | 6010B | 408611 |
| LB 500-408390/1-B | Method Blank | SPLP East | Solid | 6010B | 408611 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Metals (Continued)

Analysis Batch: 409155 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LCS 500-408611/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408611 |

General Chemistry

Analysis Batch: 408249

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|---------------------|-----------|--------|----------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | Moisture | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | Moisture | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136651-12 DU | 3160-62-6 (0-1.5') | Total/NA | Solid | Moisture | |

Analysis Batch: 409062

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|---------------------|-----------|--------|--------|------------|
| 500-136651-1 | 3160-55-1 (0-3) | Total/NA | Solid | 9045D | |
| 500-136651-2 | 3160-55-2 (0-3) | Total/NA | Solid | 9045D | |
| 500-136651-3 | 3160-56-1 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-4 | 3160-56-2 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-5 | 3160-64-1 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-6 | 3160-64-2 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-7 | 3160-64-3 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-8 | 3160-62-10 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-9 | 3160-62-9 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-10 | 3160-62-8 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-11 | 3160-62-7 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-12 | 3160-62-6 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-13 | 3160-62-5 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-14 | 3160-62-4 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-15 | 3160-62-3 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-16 | 3160-62-2 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-17 | 3160-62-1 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136651-1 DU | 3160-55-1 (0-3) | Total/NA | Solid | 9045D | |

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | |
|-------------------|------------------------|--|------------------|-------------------|-----------------|
| | | BFB (75-131) | DBFM (75-126) | 12DCE (70-134) | TOL (75-124) |
| 500-136651-1 | 3160-55-1 (0-3) | 90 | 102 | 96 | 94 |
| 500-136651-2 | 3160-55-2 (0-3) | 92 | 97 | 94 | 97 |
| 500-136651-3 | 3160-56-1 (0-1.5') | 91 | 100 | 99 | 96 |
| 500-136651-4 | 3160-56-2 (0-1.5') | 93 | 99 | 93 | 99 |
| 500-136651-5 | 3160-64-1 (0-1.5') | 93 | 102 | 95 | 100 |
| 500-136651-6 | 3160-64-2 (0-1.5') | 88 | 99 | 93 | 98 |
| 500-136651-7 | 3160-64-3 (0-1.5') | 90 | 100 | 94 | 97 |
| 500-136651-8 | 3160-62-10 (0-1.5') | 91 | 103 | 96 | 100 |
| 500-136651-9 | 3160-62-9 (0-1.5') | 90 | 100 | 88 | 100 |
| 500-136651-10 | 3160-62-8 (0-1.5') | 93 | 100 | 96 | 97 |
| 500-136651-11 | 3160-62-7 (0-1.5') | 93 | 103 | 99 | 98 |
| 500-136651-12 | 3160-62-6 (0-1.5') | 90 | 101 | 97 | 96 |
| 500-136651-13 | 3160-62-5 (0-1.5') | 92 | 100 | 94 | 97 |
| 500-136651-14 | 3160-62-4 (0-1.5') | 90 | 101 | 97 | 96 |
| 500-136651-15 | 3160-62-3 (0-1.5') | 88 | 102 | 96 | 97 |
| 500-136651-16 | 3160-62-2 (0-1.5') | 91 | 101 | 97 | 98 |
| 500-136651-17 | 3160-62-1 (0-1.5') | 92 | 98 | 99 | 95 |
| LCS 500-408943/4 | Lab Control Sample | 92 | 99 | 85 | 100 |
| LCSD 500-408943/5 | Lab Control Sample Dup | 93 | 97 | 88 | 98 |
| MB 500-408943/7 | Method Blank | 92 | 96 | 91 | 96 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|------------------|---------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | FBP (44-121) | 2FP (46-133) | NBZ (41-120) | PHL (46-125) | TPH (35-160) | TBP (25-139) |
| 500-136651-1 | 3160-55-1 (0-3) | 66 | 79 | 68 | 72 | 93 | 63 |
| 500-136651-2 | 3160-55-2 (0-3) | 72 | 79 | 67 | 85 | 86 | 85 |
| 500-136651-2 MS | 3160-55-2 (0-3) | 67 | 74 | 66 | 82 | 102 | 74 |
| 500-136651-2 MSD | 3160-55-2 (0-3) | 72 | 85 | 75 | 84 | 111 | 82 |
| 500-136651-3 | 3160-56-1 (0-1.5') | 75 | 83 | 70 | 86 | 102 | 71 |
| 500-136651-4 | 3160-56-2 (0-1.5') | 66 | 63 | 52 | 71 | 78 | 74 |
| 500-136651-5 | 3160-64-1 (0-1.5') | 72 | 77 | 68 | 75 | 90 | 68 |
| 500-136651-6 | 3160-64-2 (0-1.5') | 69 | 72 | 59 | 78 | 88 | 91 |
| 500-136651-7 | 3160-64-3 (0-1.5') | 62 | 63 | 55 | 71 | 82 | 72 |
| 500-136651-8 | 3160-62-10 (0-1.5') | 49 | 46 | 41 | 52 | 60 | 62 |
| 500-136651-9 | 3160-62-9 (0-1.5') | 72 | 77 | 66 | 76 | 67 | 73 |
| 500-136651-10 | 3160-62-8 (0-1.5') | 69 | 77 | 61 | 80 | 81 | 90 |
| 500-136651-11 | 3160-62-7 (0-1.5') | 78 | 80 | 69 | 89 | 84 | 96 |
| 500-136651-12 | 3160-62-6 (0-1.5') | 73 | 72 | 64 | 86 | 88 | 94 |
| 500-136651-13 | 3160-62-5 (0-1.5') | 74 | 81 | 69 | 79 | 70 | 73 |
| 500-136651-14 | 3160-62-4 (0-1.5') | 67 | 66 | 59 | 77 | 83 | 80 |

TestAmerica Chicago

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|--------------------|--------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | FBP (44-121) | 2FP (46-133) | NBZ (41-120) | PHL (46-125) | TPH (35-160) | TBP (25-139) |
| 500-136651-15 | 3160-62-3 (0-1.5') | 72 | 75 | 64 | 86 | 79 | 89 |
| 500-136651-16 | 3160-62-2 (0-1.5') | 60 | 58 | 50 | 70 | 80 | 78 |
| 500-136651-17 | 3160-62-1 (0-1.5') | 75 | 77 | 67 | 71 | 88 | 62 |
| LCS 500-409105/2-A | Lab Control Sample | 47 | 46 | 37 X | 59 | 87 | 90 |
| LCS 500-409783/2-A | Lab Control Sample | 77 | 87 | 72 | 88 | 77 | 84 |
| MB 500-409105/1-A | Method Blank | 56 | 51 | 43 | 61 | 87 | 86 |
| MB 500-409783/1-A | Method Blank | 78 | 85 | 65 | 85 | 74 | 73 |

Surrogate Legend

FBP = 2-Fluorobiphenyl
 2FP = 2-Fluorophenol
 NBZ = Nitrobenzene-d5
 PHL = Phenol-d5
 TPH = Terphenyl-d14
 TBP = 2,4,6-Tribromophenol

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|--------------------|--------------------|--|------------------|
| | | DCB1 (33-148) | TCX1 (30-121) |
| 500-136651-1 | 3160-55-1 (0-3) | 94 | 89 |
| 500-136651-2 | 3160-55-2 (0-3) | 82 | 75 |
| 500-136651-3 | 3160-56-1 (0-1.5') | 87 | 97 |
| 500-136651-4 | 3160-56-2 (0-1.5') | 87 | 92 |
| LCS 500-408939/2-A | Lab Control Sample | 84 | 84 |
| MB 500-408939/1-A | Method Blank | 83 | 79 |

Surrogate Legend

DCB = DCB Decachlorobiphenyl
 TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|--------------------|--------------------|--|------------------|
| | | TCX2 (49-129) | DCB2 (37-121) |
| 500-136651-5 | 3160-64-1 (0-1.5') | 96 | 89 |
| 500-136651-6 | 3160-64-2 (0-1.5') | 95 | 88 |
| 500-136651-7 | 3160-64-3 (0-1.5') | 94 | 81 |
| LCS 500-408939/3-A | Lab Control Sample | 109 | 108 |
| MB 500-408939/1-A | Method Blank | 114 | 115 |

Surrogate Legend

TCX = Tetrachloro-m-xylene
 DCB = DCB Decachlorobiphenyl

TestAmerica Chicago

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | DCPA2 (25-120) |
|--------------------|--------------------|-------------------|
| 500-136651-1 | 3160-55-1 (0-3) | 47 |
| 500-136651-2 | 3160-55-2 (0-3) | 50 |
| 500-136651-3 | 3160-56-1 (0-1.5') | 48 |
| 500-136651-4 | 3160-56-2 (0-1.5') | 43 |
| LCS 500-409129/2-A | Lab Control Sample | 55 |
| MB 500-409129/1-A | Method Blank | 50 |

Surrogate Legend

DCPA = DCAA

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408943/7

Matrix: Solid

Analysis Batch: 408943

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/08/17 11:10 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/08/17 11:10 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/08/17 11:10 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/08/17 11:10 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/08/17 11:10 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/08/17 11:10 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/08/17 11:10 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 | | 11/08/17 11:10 | 1 |
| Dibromofluoromethane | 96 | | 75 - 126 | | 11/08/17 11:10 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 70 - 134 | | 11/08/17 11:10 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | | 11/08/17 11:10 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408943/4

Matrix: Solid

Analysis Batch: 408943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0375 | | mg/Kg | | 75 | 40 - 150 |
| Benzene | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 67 - 129 |
| Bromoform | 0.0500 | 0.0463 | | mg/Kg | | 93 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0435 | | mg/Kg | | 87 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0335 | | mg/Kg | | 67 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0515 | | mg/Kg | | 103 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0484 | | mg/Kg | | 97 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0412 | | mg/Kg | | 82 | 75 - 125 |
| Chloroform | 0.0500 | 0.0471 | | mg/Kg | | 94 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0419 | | mg/Kg | | 84 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0487 | | mg/Kg | | 97 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0517 | | mg/Kg | | 103 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0496 | | mg/Kg | | 99 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0460 | | mg/Kg | | 92 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0413 | | mg/Kg | | 83 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0474 | | mg/Kg | | 95 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0418 | | mg/Kg | | 84 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0499 | | mg/Kg | | 100 | 50 - 140 |
| Styrene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 70 - 125 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0540 | | mg/Kg | | 108 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 124 |
| Toluene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0474 | | mg/Kg | | 95 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0451 | | mg/Kg | | 90 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0441 | | mg/Kg | | 88 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.0944 | | mg/Kg | | 94 | 53 - 147 |

| Surrogate | LCS LCS | | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 92 | | 75 - 131 |
| Dibromofluoromethane | 99 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 85 | | 70 - 134 |
| Toluene-d8 (Surr) | 100 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-408943/5
Matrix: Solid
Analysis Batch: 408943

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0443 | | mg/Kg | | 89 | 40 - 150 | 17 | 30 |
| Benzene | 0.0500 | 0.0473 | | mg/Kg | | 95 | 70 - 125 | 2 | 30 |
| Bromodichloromethane | 0.0500 | 0.0500 | | mg/Kg | | 100 | 67 - 129 | 1 | 30 |
| Bromoform | 0.0500 | 0.0497 | | mg/Kg | | 99 | 68 - 136 | 7 | 30 |
| Bromomethane | 0.0500 | 0.0402 | | mg/Kg | | 80 | 70 - 130 | 8 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0431 | | mg/Kg | | 86 | 47 - 138 | 25 | 30 |
| Carbon disulfide | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 129 | 6 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0462 | | mg/Kg | | 92 | 75 - 125 | 5 | 30 |
| Chlorobenzene | 0.0500 | 0.0470 | | mg/Kg | | 94 | 50 - 150 | 2 | 30 |
| Chloroethane | 0.0500 | 0.0380 | | mg/Kg | | 76 | 75 - 125 | 8 | 30 |
| Chloroform | 0.0500 | 0.0453 | | mg/Kg | | 91 | 57 - 135 | 4 | 30 |
| Chloromethane | 0.0500 | 0.0398 | | mg/Kg | | 80 | 70 - 125 | 5 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 70 - 125 | 1 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 70 - 125 | 2 | 30 |
| Dibromochloromethane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 69 - 125 | 2 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0441 | | mg/Kg | | 88 | 70 - 125 | 4 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0445 | | mg/Kg | | 89 | 70 - 130 | 1 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 70 - 120 | 5 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0480 | | mg/Kg | | 96 | 70 - 125 | 2 | 30 |
| Ethylbenzene | 0.0500 | 0.0467 | | mg/Kg | | 93 | 61 - 136 | 2 | 30 |
| 2-Hexanone | 0.0500 | 0.0489 | | mg/Kg | | 98 | 48 - 146 | 17 | 30 |
| Methylene Chloride | 0.0500 | 0.0471 | | mg/Kg | | 94 | 70 - 126 | 1 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0486 | | mg/Kg | | 97 | 50 - 148 | 15 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0511 | | mg/Kg | | 102 | 50 - 140 | 2 | 30 |
| Styrene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 70 - 125 | 3 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0547 | | mg/Kg | | 109 | 70 - 122 | 1 | 30 |
| Tetrachloroethene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 70 - 124 | 4 | 30 |
| Toluene | 0.0500 | 0.0471 | | mg/Kg | | 94 | 70 - 125 | 4 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0464 | | mg/Kg | | 93 | 70 - 125 | 2 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 | 3 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0470 | | mg/Kg | | 94 | 70 - 128 | 3 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 125 | 4 | 30 |
| Trichloroethene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 125 | 3 | 30 |
| Vinyl acetate | 0.0500 | 0.0493 | | mg/Kg | | 99 | 40 - 153 | 9 | 30 |
| Vinyl chloride | 0.0500 | 0.0421 | | mg/Kg | | 84 | 70 - 125 | 5 | 30 |
| Xylenes, Total | 0.100 | 0.0920 | | mg/Kg | | 92 | 53 - 147 | 3 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 93 | | 75 - 131 |
| Dibromofluoromethane | 97 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 88 | | 70 - 134 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-409105/1-A

Matrix: Solid

Analysis Batch: 409157

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 409105

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-409105/1-A
Matrix: Solid
Analysis Batch: 409157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409105

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/08/17 17:13 | 11/09/17 11:40 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 56 | | 44 - 121 | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2-Fluorophenol | 51 | | 46 - 133 | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Nitrobenzene-d5 | 43 | | 41 - 120 | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Phenol-d5 | 61 | | 46 - 125 | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| Terphenyl-d14 | 87 | | 35 - 160 | 11/08/17 17:13 | 11/09/17 11:40 | 1 |
| 2,4,6-Tribromophenol | 86 | | 25 - 139 | 11/08/17 17:13 | 11/09/17 11:40 | 1 |

Lab Sample ID: LCS 500-409105/2-A
Matrix: Solid
Analysis Batch: 409157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409105

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 1.04 | | mg/Kg | | 78 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.09 | | mg/Kg | | 82 | 60 - 110 |
| Anthracene | 1.33 | 1.17 | | mg/Kg | | 88 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.20 | | mg/Kg | | 90 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.16 | | mg/Kg | | 87 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.17 | | mg/Kg | | 88 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.21 | | mg/Kg | | 91 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.12 | | mg/Kg | | 84 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.13 | | mg/Kg | | 85 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.11 | | mg/Kg | | 83 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.37 | | mg/Kg | | 103 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.16 | | mg/Kg | | 87 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.30 | | mg/Kg | | 97 | 61 - 116 |
| Carbazole | 1.33 | 1.36 | | mg/Kg | | 102 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 1.06 | | mg/Kg | | 79 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.19 | | mg/Kg | | 89 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.13 | | mg/Kg | | 84 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.14 | | mg/Kg | | 86 | 64 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409105/2-A
Matrix: Solid
Analysis Batch: 409157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409105

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Chlorophenyl phenyl ether | 1.33 | 1.12 | | mg/Kg | | 84 | 63 - 110 |
| Chrysene | 1.33 | 1.15 | | mg/Kg | | 86 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.28 | | mg/Kg | | 96 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.13 | | mg/Kg | | 84 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 1.03 | | mg/Kg | | 77 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 1.00 | | mg/Kg | | 75 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 0.982 | | mg/Kg | | 74 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 1.20 | | mg/Kg | | 90 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.16 | | mg/Kg | | 87 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.13 | | mg/Kg | | 85 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.23 | | mg/Kg | | 92 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.14 | | mg/Kg | | 86 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.21 | | mg/Kg | | 91 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.11 | | mg/Kg | | 42 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 0.682 | | mg/Kg | | 26 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.23 | | mg/Kg | | 92 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.17 | | mg/Kg | | 88 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.30 | | mg/Kg | | 97 | 63 - 119 |
| Fluoranthene | 1.33 | 1.10 | | mg/Kg | | 82 | 62 - 120 |
| Fluorene | 1.33 | 1.11 | | mg/Kg | | 83 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.12 | | mg/Kg | | 84 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 1.02 | | mg/Kg | | 76 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.929 | | mg/Kg | | 70 | 10 - 106 |
| Hexachloroethane | 1.33 | 1.02 | | mg/Kg | | 77 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.28 | | mg/Kg | | 96 | 57 - 127 |
| Isophorone | 1.33 | 1.06 | | mg/Kg | | 79 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.11 | | mg/Kg | | 83 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.11 | | mg/Kg | | 83 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.05 | | mg/Kg | | 79 | 57 - 120 |
| Naphthalene | 1.33 | 1.06 | | mg/Kg | | 80 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.18 | | mg/Kg | | 88 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.26 | | mg/Kg | | 94 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.67 | | mg/Kg | | 125 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.07 | | mg/Kg | | 81 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.21 | | mg/Kg | | 91 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 1.85 | | mg/Kg | | 70 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 1.13 | | mg/Kg | | 85 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.18 | | mg/Kg | | 89 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.18 | | mg/Kg | | 89 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.86 | | mg/Kg | | 70 | 13 - 112 |
| Phenanthrene | 1.33 | 1.14 | | mg/Kg | | 86 | 62 - 120 |
| Phenol | 1.33 | 1.09 | | mg/Kg | | 82 | 56 - 122 |
| Pyrene | 1.33 | 1.19 | | mg/Kg | | 89 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.05 | | mg/Kg | | 79 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.13 | | mg/Kg | | 84 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 57 - 120 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409105/2-A
Matrix: Solid
Analysis Batch: 409157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409105

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 47 | | 44 - 121 |
| 2-Fluorophenol | 46 | | 46 - 133 |
| Nitrobenzene-d5 | 37 | X | 41 - 120 |
| Phenol-d5 | 59 | | 46 - 125 |
| Terphenyl-d14 | 87 | | 35 - 160 |
| 2,4,6-Tribromophenol | 90 | | 25 - 139 |

Lab Sample ID: 500-136651-2 MS
Matrix: Solid
Analysis Batch: 409157

Client Sample ID: 3160-55-2 (0-3)
Prep Type: Total/NA
Prep Batch: 409105

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Acenaphthene | <0.038 | | 1.55 | 1.13 | | mg/Kg | ☼ | 73 | 58 - 110 |
| Acenaphthylene | <0.038 | | 1.55 | 1.20 | | mg/Kg | ☼ | 77 | 60 - 110 |
| Anthracene | <0.038 | | 1.55 | 1.28 | | mg/Kg | ☼ | 83 | 63 - 110 |
| Benzo[a]anthracene | 0.0075 | J | 1.55 | 1.34 | | mg/Kg | ☼ | 86 | 63 - 110 |
| Benzo[a]pyrene | 0.018 | J | 1.55 | 1.33 | | mg/Kg | ☼ | 85 | 61 - 120 |
| Benzo[b]fluoranthene | <0.038 | F1 | 1.55 | 1.63 | | mg/Kg | ☼ | 105 | 62 - 120 |
| Benzo[g,h,i]perylene | <0.038 | F1 | 1.55 | 0.636 | F1 | mg/Kg | ☼ | 41 | 64 - 120 |
| Benzo[k]fluoranthene | <0.038 | F1 | 1.55 | 1.71 | | mg/Kg | ☼ | 110 | 65 - 120 |
| Bis(2-chloroethoxy)methane | <0.19 | | 1.55 | 1.25 | | mg/Kg | ☼ | 81 | 60 - 112 |
| Bis(2-chloroethyl)ether | <0.19 | | 1.55 | 1.25 | | mg/Kg | ☼ | 80 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | <0.19 | F1 | 1.55 | 1.88 | F1 | mg/Kg | ☼ | 121 | 63 - 118 |
| 4-Bromophenyl phenyl ether | <0.19 | | 1.55 | 1.27 | | mg/Kg | ☼ | 82 | 63 - 110 |
| Butyl benzyl phthalate | <0.19 | F1 | 1.55 | 1.76 | | mg/Kg | ☼ | 113 | 61 - 116 |
| Carbazole | <0.19 | | 1.55 | 1.54 | | mg/Kg | ☼ | 99 | 59 - 158 |
| 4-Chloroaniline | <0.77 | | 1.55 | 0.976 | | mg/Kg | ☼ | 63 | 30 - 150 |
| 4-Chloro-3-methylphenol | <0.38 | | 1.55 | 1.28 | | mg/Kg | ☼ | 82 | 61 - 114 |
| 2-Chloronaphthalene | <0.19 | | 1.55 | 1.18 | | mg/Kg | ☼ | 76 | 64 - 110 |
| 2-Chlorophenol | <0.19 | | 1.55 | 1.21 | | mg/Kg | ☼ | 78 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 1.55 | 1.16 | | mg/Kg | ☼ | 75 | 63 - 110 |
| Chrysene | <0.038 | | 1.55 | 1.32 | | mg/Kg | ☼ | 85 | 63 - 120 |
| Dibenz(a,h)anthracene | <0.038 | F1 | 1.55 | 0.838 | F1 | mg/Kg | ☼ | 54 | 64 - 119 |
| Dibenzofuran | <0.19 | | 1.55 | 1.22 | | mg/Kg | ☼ | 79 | 64 - 110 |
| 1,2-Dichlorobenzene | <0.19 | | 1.55 | 1.03 | | mg/Kg | ☼ | 66 | 62 - 110 |
| 1,3-Dichlorobenzene | <0.19 | | 1.55 | 0.969 | | mg/Kg | ☼ | 63 | 60 - 110 |
| 1,4-Dichlorobenzene | <0.19 | | 1.55 | 1.01 | | mg/Kg | ☼ | 65 | 61 - 110 |
| 3,3'-Dichlorobenzidine | <0.19 | F2 | 1.55 | 0.791 | | mg/Kg | ☼ | 51 | 49 - 112 |
| 2,4-Dichlorophenol | <0.38 | | 1.55 | 1.31 | | mg/Kg | ☼ | 85 | 58 - 120 |
| Diethyl phthalate | <0.19 | | 1.55 | 1.13 | | mg/Kg | ☼ | 73 | 58 - 120 |
| 2,4-Dimethylphenol | <0.38 | | 1.55 | 1.30 | | mg/Kg | ☼ | 84 | 60 - 110 |
| Dimethyl phthalate | <0.19 | | 1.55 | 1.16 | | mg/Kg | ☼ | 75 | 64 - 110 |
| Di-n-butyl phthalate | <0.19 | | 1.55 | 1.29 | | mg/Kg | ☼ | 83 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 3.10 | 0.491 | J | mg/Kg | ☼ | 16 | 10 - 110 |
| 2,4-Dinitrophenol | <0.77 | F1 | 3.10 | <0.78 | F1 | mg/Kg | ☼ | 0 | 10 - 100 |
| 2,4-Dinitrotoluene | <0.19 | | 1.55 | 1.20 | | mg/Kg | ☼ | 78 | 62 - 117 |
| 2,6-Dinitrotoluene | <0.19 | | 1.55 | 1.20 | | mg/Kg | ☼ | 78 | 67 - 120 |
| Di-n-octyl phthalate | <0.19 | | 1.55 | 1.41 | | mg/Kg | ☼ | 91 | 63 - 119 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136651-2 MS

Matrix: Solid

Analysis Batch: 409157

Client Sample ID: 3160-55-2 (0-3)

Prep Type: Total/NA

Prep Batch: 409105

| Analyte | Sample | Sample | Spike | MS | MS | Unit | D | %Rec | %Rec. | Limits |
|------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | |
| Fluoranthene | 0.013 | J | 1.55 | 1.34 | | mg/Kg | ☼ | 86 | | 62 - 120 |
| Fluorene | <0.038 | | 1.55 | 1.19 | | mg/Kg | ☼ | 77 | | 62 - 120 |
| Hexachlorobenzene | <0.077 | | 1.55 | 1.27 | | mg/Kg | ☼ | 82 | | 55 - 117 |
| Hexachlorobutadiene | <0.19 | | 1.55 | 1.13 | | mg/Kg | ☼ | 73 | | 56 - 120 |
| Hexachlorocyclopentadiene | <0.77 | F1 | 1.55 | <0.78 | F1 | mg/Kg | ☼ | 0 | | 10 - 106 |
| Hexachloroethane | <0.19 | F1 | 1.55 | 0.896 | F1 | mg/Kg | ☼ | 58 | | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | <0.038 | F1 | 1.55 | 0.803 | F1 | mg/Kg | ☼ | 52 | | 57 - 127 |
| Isophorone | <0.19 | | 1.55 | 1.15 | | mg/Kg | ☼ | 74 | | 55 - 110 |
| 2-Methylnaphthalene | 0.0080 | J | 1.55 | 1.26 | | mg/Kg | ☼ | 81 | | 62 - 110 |
| 2-Methylphenol | <0.19 | F1 F2 | 1.55 | 1.21 | | mg/Kg | ☼ | 78 | | 60 - 120 |
| 3 & 4 Methylphenol | <0.19 | | 1.55 | 1.33 | | mg/Kg | ☼ | 86 | | 57 - 120 |
| Naphthalene | <0.038 | | 1.55 | 1.12 | | mg/Kg | ☼ | 73 | | 63 - 110 |
| 2-Nitroaniline | <0.19 | | 1.55 | 1.24 | | mg/Kg | ☼ | 80 | | 57 - 124 |
| 3-Nitroaniline | <0.38 | | 1.55 | 1.34 | | mg/Kg | ☼ | 87 | | 40 - 122 |
| 4-Nitroaniline | <0.38 | | 1.55 | 1.86 | | mg/Kg | ☼ | 120 | | 60 - 160 |
| Nitrobenzene | <0.038 | | 1.55 | 1.17 | | mg/Kg | ☼ | 75 | | 60 - 116 |
| 2-Nitrophenol | <0.38 | | 1.55 | 1.35 | | mg/Kg | ☼ | 87 | | 60 - 120 |
| 4-Nitrophenol | <0.77 | | 3.10 | 2.30 | | mg/Kg | ☼ | 74 | | 30 - 122 |
| N-Nitrosodi-n-propylamine | <0.077 | | 1.55 | 1.25 | | mg/Kg | ☼ | 81 | | 56 - 118 |
| N-Nitrosodiphenylamine | <0.19 | | 1.55 | 1.24 | | mg/Kg | ☼ | 80 | | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 1.55 | 1.19 | | mg/Kg | ☼ | 77 | | 40 - 124 |
| Pentachlorophenol | <0.77 | | 3.10 | 1.69 | | mg/Kg | ☼ | 55 | | 13 - 112 |
| Phenanthrene | 0.014 | J | 1.55 | 1.42 | | mg/Kg | ☼ | 91 | | 62 - 120 |
| Phenol | <0.19 | | 1.55 | 1.28 | | mg/Kg | ☼ | 82 | | 56 - 122 |
| Pyrene | 0.015 | J | 1.55 | 1.58 | | mg/Kg | ☼ | 101 | | 63 - 120 |
| 1,2,4-Trichlorobenzene | <0.19 | | 1.55 | 1.09 | | mg/Kg | ☼ | 70 | | 62 - 110 |
| 2,4,5-Trichlorophenol | <0.38 | | 1.55 | 1.23 | | mg/Kg | ☼ | 79 | | 50 - 120 |
| 2,4,6-Trichlorophenol | <0.38 | | 1.55 | 1.29 | | mg/Kg | ☼ | 83 | | 57 - 120 |

| Surrogate | MS | MS | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 2-Fluorobiphenyl | 67 | | 44 - 121 |
| 2-Fluorophenol | 74 | | 46 - 133 |
| Nitrobenzene-d5 | 66 | | 41 - 120 |
| Phenol-d5 | 82 | | 46 - 125 |
| Terphenyl-d14 | 102 | | 35 - 160 |
| 2,4,6-Tribromophenol | 74 | | 25 - 139 |

Lab Sample ID: 500-136651-2 MSD

Matrix: Solid

Analysis Batch: 409157

Client Sample ID: 3160-55-2 (0-3)

Prep Type: Total/NA

Prep Batch: 409105

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | Limits | RPD | Limit |
|----------------------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | | | |
| Acenaphthene | <0.038 | | 1.56 | 1.26 | | mg/Kg | ☼ | 81 | | 58 - 110 | 11 | 30 |
| Acenaphthylene | <0.038 | | 1.56 | 1.34 | | mg/Kg | ☼ | 85 | | 60 - 110 | 11 | 30 |
| Anthracene | <0.038 | | 1.56 | 1.43 | | mg/Kg | ☼ | 91 | | 63 - 110 | 11 | 30 |
| Benzo[a]anthracene | 0.0075 | J | 1.56 | 1.48 | | mg/Kg | ☼ | 94 | | 63 - 110 | 10 | 30 |
| Benzo[a]pyrene | 0.018 | J | 1.56 | 1.48 | | mg/Kg | ☼ | 93 | | 61 - 120 | 11 | 30 |
| Benzo[b]fluoranthene | <0.038 | F1 | 1.56 | 1.90 | F1 | mg/Kg | ☼ | 122 | | 62 - 120 | 15 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136651-2 MSD

Matrix: Solid

Analysis Batch: 409157

Client Sample ID: 3160-55-2 (0-3)

Prep Type: Total/NA

Prep Batch: 409105

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | RPD | RPD |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-------|-----|
| | Result | Qualifier | Added | Result | Qualifier | | | | Limits | Limit | |
| Benzo[g,h,i]perylene | <0.038 | F1 | 1.56 | 0.657 | F1 | mg/Kg | ☼ | 42 | 64 - 120 | 3 | 30 |
| Benzo[k]fluoranthene | <0.038 | F1 | 1.56 | 1.97 | F1 | mg/Kg | ☼ | 126 | 65 - 120 | 14 | 30 |
| Bis(2-chloroethoxy)methane | <0.19 | | 1.56 | 1.40 | | mg/Kg | ☼ | 90 | 60 - 112 | 11 | 30 |
| Bis(2-chloroethyl)ether | <0.19 | | 1.56 | 1.39 | | mg/Kg | ☼ | 89 | 55 - 111 | 11 | 30 |
| Bis(2-ethylhexyl) phthalate | <0.19 | F1 | 1.56 | 2.19 | F1 | mg/Kg | ☼ | 140 | 63 - 118 | 15 | 30 |
| 4-Bromophenyl phenyl ether | <0.19 | | 1.56 | 1.39 | | mg/Kg | ☼ | 89 | 63 - 110 | 8 | 30 |
| Butyl benzyl phthalate | <0.19 | F1 | 1.56 | 1.94 | F1 | mg/Kg | ☼ | 124 | 61 - 116 | 10 | 30 |
| Carbazole | <0.19 | | 1.56 | 1.71 | | mg/Kg | ☼ | 109 | 59 - 158 | 10 | 30 |
| 4-Chloroaniline | <0.77 | | 1.56 | 1.05 | | mg/Kg | ☼ | 67 | 30 - 150 | 8 | 30 |
| 4-Chloro-3-methylphenol | <0.38 | | 1.56 | 1.51 | | mg/Kg | ☼ | 96 | 61 - 114 | 16 | 30 |
| 2-Chloronaphthalene | <0.19 | | 1.56 | 1.35 | | mg/Kg | ☼ | 86 | 64 - 110 | 13 | 30 |
| 2-Chlorophenol | <0.19 | | 1.56 | 1.39 | | mg/Kg | ☼ | 89 | 64 - 110 | 14 | 30 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 1.56 | 1.39 | | mg/Kg | ☼ | 89 | 63 - 110 | 18 | 30 |
| Chrysene | <0.038 | | 1.56 | 1.47 | | mg/Kg | ☼ | 94 | 63 - 120 | 10 | 30 |
| Dibenz(a,h)anthracene | <0.038 | F1 | 1.56 | 0.935 | F1 | mg/Kg | ☼ | 60 | 64 - 119 | 11 | 30 |
| Dibenzofuran | <0.19 | | 1.56 | 1.37 | | mg/Kg | ☼ | 88 | 64 - 110 | 12 | 30 |
| 1,2-Dichlorobenzene | <0.19 | | 1.56 | 1.12 | | mg/Kg | ☼ | 72 | 62 - 110 | 8 | 30 |
| 1,3-Dichlorobenzene | <0.19 | | 1.56 | 1.06 | | mg/Kg | ☼ | 68 | 60 - 110 | 9 | 30 |
| 1,4-Dichlorobenzene | <0.19 | | 1.56 | 1.07 | | mg/Kg | ☼ | 69 | 61 - 110 | 6 | 30 |
| 3,3'-Dichlorobenzidine | <0.19 | F2 | 1.56 | 1.15 | F2 | mg/Kg | ☼ | 74 | 49 - 112 | 37 | 30 |
| 2,4-Dichlorophenol | <0.38 | | 1.56 | 1.50 | | mg/Kg | ☼ | 96 | 58 - 120 | 13 | 30 |
| Diethyl phthalate | <0.19 | | 1.56 | 1.29 | | mg/Kg | ☼ | 83 | 58 - 120 | 13 | 30 |
| 2,4-Dimethylphenol | <0.38 | | 1.56 | 1.15 | | mg/Kg | ☼ | 73 | 60 - 110 | 12 | 30 |
| Dimethyl phthalate | <0.19 | | 1.56 | 1.41 | | mg/Kg | ☼ | 91 | 64 - 110 | 20 | 30 |
| Di-n-butyl phthalate | <0.19 | | 1.56 | 1.48 | | mg/Kg | ☼ | 95 | 65 - 120 | 14 | 30 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 3.12 | 0.419 | J | mg/Kg | ☼ | 13 | 10 - 110 | 16 | 30 |
| 2,4-Dinitrophenol | <0.77 | F1 | 3.12 | <0.78 | F1 | mg/Kg | ☼ | 0 | 10 - 100 | NC | 30 |
| 2,4-Dinitrotoluene | <0.19 | | 1.56 | 1.42 | | mg/Kg | ☼ | 91 | 62 - 117 | 17 | 30 |
| 2,6-Dinitrotoluene | <0.19 | | 1.56 | 1.42 | | mg/Kg | ☼ | 91 | 67 - 120 | 17 | 30 |
| Di-n-octyl phthalate | <0.19 | | 1.56 | 1.67 | | mg/Kg | ☼ | 107 | 63 - 119 | 17 | 30 |
| Fluoranthene | 0.013 | J | 1.56 | 1.47 | | mg/Kg | ☼ | 93 | 62 - 120 | 9 | 30 |
| Fluorene | <0.038 | | 1.56 | 1.38 | | mg/Kg | ☼ | 88 | 62 - 120 | 14 | 30 |
| Hexachlorobenzene | <0.077 | | 1.56 | 1.48 | | mg/Kg | ☼ | 95 | 55 - 117 | 16 | 30 |
| Hexachlorobutadiene | <0.19 | | 1.56 | 1.12 | | mg/Kg | ☼ | 72 | 56 - 120 | 1 | 30 |
| Hexachlorocyclopentadiene | <0.77 | F1 | 1.56 | <0.78 | F1 | mg/Kg | ☼ | 0 | 10 - 106 | NC | 30 |
| Hexachloroethane | <0.19 | F1 | 1.56 | 0.963 | | mg/Kg | ☼ | 62 | 61 - 110 | 7 | 30 |
| Indeno[1,2,3-cd]pyrene | <0.038 | F1 | 1.56 | 0.892 | | mg/Kg | ☼ | 57 | 57 - 127 | 10 | 30 |
| Isophorone | <0.19 | | 1.56 | 1.30 | | mg/Kg | ☼ | 83 | 55 - 110 | 12 | 30 |
| 2-Methylnaphthalene | 0.0080 | J | 1.56 | 1.36 | | mg/Kg | ☼ | 87 | 62 - 110 | 8 | 30 |
| 2-Methylphenol | <0.19 | F1 F2 | 1.56 | 2.02 | F1 F2 | mg/Kg | ☼ | 129 | 60 - 120 | 50 | 30 |
| 3 & 4 Methylphenol | <0.19 | | 1.56 | 1.47 | | mg/Kg | ☼ | 94 | 57 - 120 | 10 | 30 |
| Naphthalene | <0.038 | | 1.56 | 1.27 | | mg/Kg | ☼ | 81 | 63 - 110 | 12 | 30 |
| 2-Nitroaniline | <0.19 | | 1.56 | 1.47 | | mg/Kg | ☼ | 94 | 57 - 124 | 17 | 30 |
| 3-Nitroaniline | <0.38 | | 1.56 | 1.65 | | mg/Kg | ☼ | 106 | 40 - 122 | 20 | 30 |
| 4-Nitroaniline | <0.38 | | 1.56 | 2.01 | | mg/Kg | ☼ | 129 | 60 - 160 | 8 | 30 |
| Nitrobenzene | <0.038 | | 1.56 | 1.29 | | mg/Kg | ☼ | 83 | 60 - 116 | 10 | 30 |
| 2-Nitrophenol | <0.38 | | 1.56 | 1.50 | | mg/Kg | ☼ | 96 | 60 - 120 | 11 | 30 |
| 4-Nitrophenol | <0.77 | | 3.12 | 1.96 | | mg/Kg | ☼ | 63 | 30 - 122 | 16 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136651-2 MSD

Matrix: Solid

Analysis Batch: 409157

Client Sample ID: 3160-55-2 (0-3)

Prep Type: Total/NA

Prep Batch: 409105

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | Limits | RPD | Limit |
|------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|--------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | | | |
| N-Nitrosodi-n-propylamine | <0.077 | | 1.56 | 1.40 | | mg/Kg | ☼ | 89 | 56 - 118 | 11 | 30 | |
| N-Nitrosodiphenylamine | <0.19 | | 1.56 | 1.43 | | mg/Kg | ☼ | 91 | 65 - 112 | 14 | 30 | |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 1.56 | 1.37 | | mg/Kg | ☼ | 88 | 40 - 124 | 14 | 30 | |
| Pentachlorophenol | <0.77 | | 3.12 | 1.64 | | mg/Kg | ☼ | 52 | 13 - 112 | 3 | 30 | |
| Phenanthrene | 0.014 | J | 1.56 | 1.53 | | mg/Kg | ☼ | 97 | 62 - 120 | 7 | 30 | |
| Phenol | <0.19 | | 1.56 | 1.45 | | mg/Kg | ☼ | 93 | 56 - 122 | 13 | 30 | |
| Pyrene | 0.015 | J | 1.56 | 1.75 | | mg/Kg | ☼ | 111 | 63 - 120 | 10 | 30 | |
| 1,2,4-Trichlorobenzene | <0.19 | | 1.56 | 1.21 | | mg/Kg | ☼ | 78 | 62 - 110 | 11 | 30 | |
| 2,4,5-Trichlorophenol | <0.38 | | 1.56 | 1.42 | | mg/Kg | ☼ | 91 | 50 - 120 | 15 | 30 | |
| 2,4,6-Trichlorophenol | <0.38 | | 1.56 | 1.40 | | mg/Kg | ☼ | 90 | 57 - 120 | 9 | 30 | |

| Surrogate | MSD | MSD | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 2-Fluorobiphenyl | 72 | | 44 - 121 |
| 2-Fluorophenol | 85 | | 46 - 133 |
| Nitrobenzene-d5 | 75 | | 41 - 120 |
| Phenol-d5 | 84 | | 46 - 125 |
| Terphenyl-d14 | 111 | | 35 - 160 |
| 2,4,6-Tribromophenol | 82 | | 25 - 139 |

Lab Sample ID: MB 500-409783/1-A

Matrix: Solid

Analysis Batch: 409829

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 409783

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-409783/1-A
Matrix: Solid
Analysis Batch: 409829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409783

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/13/17 18:14 | 11/14/17 11:33 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 2-Fluorobiphenyl | 78 | | 44 - 121 | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2-Fluorophenol | 85 | | 46 - 133 | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Nitrobenzene-d5 | 65 | | 41 - 120 | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Phenol-d5 | 85 | | 46 - 125 | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| Terphenyl-d14 | 74 | | 35 - 160 | 11/13/17 18:14 | 11/14/17 11:33 | 1 |
| 2,4,6-Tribromophenol | 73 | | 25 - 139 | 11/13/17 18:14 | 11/14/17 11:33 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Lab Sample ID: LCS 500-409783/2-A
Matrix: Solid
Analysis Batch: 409829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409783
%Rec. Limits

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acenaphthene | 1.33 | 0.990 | | mg/Kg | | 74 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.04 | | mg/Kg | | 78 | 60 - 110 |
| Anthracene | 1.33 | 1.08 | | mg/Kg | | 81 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.05 | | mg/Kg | | 79 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.10 | | mg/Kg | | 82 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.18 | | mg/Kg | | 89 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.13 | | mg/Kg | | 85 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.15 | | mg/Kg | | 86 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.08 | | mg/Kg | | 81 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.10 | | mg/Kg | | 83 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.25 | | mg/Kg | | 94 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.11 | | mg/Kg | | 83 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.19 | | mg/Kg | | 89 | 61 - 116 |
| Carbazole | 1.33 | 1.27 | | mg/Kg | | 95 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 1.13 | | mg/Kg | | 85 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.09 | | mg/Kg | | 82 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.05 | | mg/Kg | | 78 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | 1.33 | 1.05 | | mg/Kg | | 79 | 63 - 110 |
| Chrysene | 1.33 | 1.05 | | mg/Kg | | 79 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.20 | | mg/Kg | | 90 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.04 | | mg/Kg | | 78 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 1.06 | | mg/Kg | | 79 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 1.03 | | mg/Kg | | 77 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 1.04 | | mg/Kg | | 78 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 1.07 | | mg/Kg | | 80 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.04 | | mg/Kg | | 78 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.11 | | mg/Kg | | 83 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.07 | | mg/Kg | | 80 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.16 | | mg/Kg | | 87 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 0.825 | | mg/Kg | | 31 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | <0.67 | | mg/Kg | | 15 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.16 | | mg/Kg | | 87 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.10 | | mg/Kg | | 83 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.28 | | mg/Kg | | 96 | 63 - 119 |
| Fluoranthene | 1.33 | 1.02 | | mg/Kg | | 76 | 62 - 120 |
| Fluorene | 1.33 | 1.06 | | mg/Kg | | 80 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.07 | | mg/Kg | | 80 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 0.978 | | mg/Kg | | 73 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.533 | J | mg/Kg | | 40 | 10 - 106 |
| Hexachloroethane | 1.33 | 1.04 | | mg/Kg | | 78 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.20 | | mg/Kg | | 90 | 57 - 127 |
| Isophorone | 1.33 | 0.990 | | mg/Kg | | 74 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.07 | | mg/Kg | | 80 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.12 | | mg/Kg | | 84 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.06 | | mg/Kg | | 80 | 57 - 120 |
| Naphthalene | 1.33 | 1.05 | | mg/Kg | | 79 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.07 | | mg/Kg | | 80 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.15 | | mg/Kg | | 86 | 40 - 122 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409783/2-A
Matrix: Solid
Analysis Batch: 409829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409783

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Nitroaniline | 1.33 | 1.56 | | mg/Kg | | 117 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.04 | | mg/Kg | | 78 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.16 | | mg/Kg | | 87 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 1.77 | | mg/Kg | | 66 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 1.08 | | mg/Kg | | 81 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.13 | | mg/Kg | | 85 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.18 | | mg/Kg | | 89 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.28 | | mg/Kg | | 48 | 13 - 112 |
| Phenanthrene | 1.33 | 1.08 | | mg/Kg | | 81 | 62 - 120 |
| Phenol | 1.33 | 1.12 | | mg/Kg | | 84 | 56 - 122 |
| Pyrene | 1.33 | 1.04 | | mg/Kg | | 78 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.04 | | mg/Kg | | 78 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.10 | | mg/Kg | | 82 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.04 | | mg/Kg | | 78 | 57 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 77 | | 44 - 121 |
| 2-Fluorophenol | 87 | | 46 - 133 |
| Nitrobenzene-d5 | 72 | | 41 - 120 |
| Phenol-d5 | 88 | | 46 - 125 |
| Terphenyl-d14 | 77 | | 35 - 160 |
| 2,4,6-Tribromophenol | 84 | | 25 - 139 |

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|--------------|--------|---------|-------|---|----------------|----------------|---------|
| Aldrin | <0.0017 | | 0.0017 | 0.00069 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| alpha-BHC | <0.0017 | | 0.0017 | 0.00042 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| alpha-Chlordane | <0.0017 | | 0.0017 | 0.00085 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| beta-BHC | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| 4,4'-DDD | <0.0017 | | 0.0017 | 0.00033 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| 4,4'-DDE | <0.0017 | | 0.0017 | 0.00028 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| 4,4'-DDT | <0.0017 | | 0.0017 | 0.00088 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| delta-BHC | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Dieldrin | <0.0017 | | 0.0017 | 0.00023 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endosulfan I | <0.0017 | | 0.0017 | 0.00073 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endosulfan II | <0.0017 | | 0.0017 | 0.00027 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endosulfan sulfate | <0.0017 | | 0.0017 | 0.00031 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endrin | <0.0017 | | 0.0017 | 0.00023 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endrin aldehyde | <0.0017 | | 0.0017 | 0.00028 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Endrin ketone | <0.0017 | | 0.0017 | 0.00038 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| gamma-BHC (Lindane) | <0.0017 | | 0.0017 | 0.00036 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| gamma-Chlordane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Heptachlor | <0.0017 | | 0.0017 | 0.00070 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB MB | | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Heptachlor epoxide | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Methoxychlor | <0.0083 | | 0.0083 | 0.00032 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Toxaphene | <0.017 | | 0.017 | 0.0070 | mg/Kg | | 11/08/17 07:22 | 11/08/17 20:52 | 1 |

| Surrogate | MB MB | | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| DCB Decachlorobiphenyl | 83 | | 33 - 148 | 11/08/17 07:22 | 11/08/17 20:52 | 1 |
| Tetrachloro-m-xylene | 79 | | 30 - 121 | 11/08/17 07:22 | 11/08/17 20:52 | 1 |

Lab Sample ID: LCS 500-408939/2-A
Matrix: Solid
Analysis Batch: 409066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------|-------------|------------|---------------|-------|---|------|--------------|
| | | | | | | | |
| alpha-BHC | 0.0133 | 0.0113 | | mg/Kg | | 84 | 50 - 123 |
| alpha-Chlordane | 0.0133 | 0.0105 | | mg/Kg | | 78 | 52 - 129 |
| beta-BHC | 0.0133 | 0.0125 | | mg/Kg | | 94 | 44 - 140 |
| 4,4'-DDD | 0.0133 | 0.0114 | | mg/Kg | | 86 | 47 - 137 |
| 4,4'-DDE | 0.0133 | 0.0107 | | mg/Kg | | 80 | 50 - 130 |
| 4,4'-DDT | 0.0133 | 0.0109 | | mg/Kg | | 82 | 46 - 143 |
| delta-BHC | 0.0133 | 0.0127 | | mg/Kg | | 96 | 57 - 125 |
| Dieldrin | 0.0133 | 0.0108 | | mg/Kg | | 81 | 51 - 133 |
| Endosulfan I | 0.0133 | 0.00822 | | mg/Kg | | 62 | 30 - 120 |
| Endosulfan II | 0.0133 | 0.00942 | | mg/Kg | | 71 | 30 - 120 |
| Endosulfan sulfate | 0.0133 | 0.0138 | | mg/Kg | | 104 | 42 - 150 |
| Endrin | 0.0133 | 0.0119 | | mg/Kg | | 89 | 43 - 144 |
| Endrin aldehyde | 0.0133 | 0.0114 | | mg/Kg | | 85 | 39 - 131 |
| Endrin ketone | 0.0133 | 0.0111 | | mg/Kg | | 84 | 51 - 135 |
| gamma-BHC (Lindane) | 0.0133 | 0.0111 | | mg/Kg | | 83 | 50 - 122 |
| gamma-Chlordane | 0.0133 | 0.0101 | | mg/Kg | | 76 | 52 - 132 |
| Heptachlor | 0.0133 | 0.0113 | | mg/Kg | | 85 | 53 - 129 |
| Heptachlor epoxide | 0.0133 | 0.0108 | | mg/Kg | | 81 | 50 - 139 |
| Methoxychlor | 0.0133 | 0.0102 | | mg/Kg | | 77 | 45 - 144 |

| Surrogate | LCS LCS | | Limits |
|------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| DCB Decachlorobiphenyl | 84 | | 33 - 148 |
| Tetrachloro-m-xylene | 84 | | 30 - 121 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB MB | | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| PCB-1016 | <0.017 | | 0.017 | 0.0059 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1221 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 500-408939/1-A
Matrix: Solid
Analysis Batch: 409181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1232 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1242 | <0.017 | | 0.017 | 0.0055 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1248 | <0.017 | | 0.017 | 0.0066 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1254 | <0.017 | | 0.017 | 0.0036 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| PCB-1260 | <0.017 | | 0.017 | 0.0082 | mg/Kg | | 11/08/17 07:22 | 11/09/17 10:25 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|--------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 114 | | 49 - 129 | 11/08/17 07:22 | 11/09/17 10:25 | 1 |
| DCB Decachlorobiphenyl | 115 | | 37 - 121 | 11/08/17 07:22 | 11/09/17 10:25 | 1 |

Lab Sample ID: LCS 500-408939/3-A
Matrix: Solid
Analysis Batch: 409181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408939

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| PCB-1016 | 0.167 | 0.177 | | mg/Kg | | 106 | 57 - 120 |
| PCB-1260 | 0.167 | 0.176 | | mg/Kg | | 106 | 61 - 125 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------|---------------|---------------|----------|
| Tetrachloro-m-xylene | 109 | | 49 - 129 |
| DCB Decachlorobiphenyl | 108 | | 37 - 121 |

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-409129/1-A
Matrix: Solid
Analysis Batch: 409021

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409129

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|-----------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Dicamba | <0.33 | | 0.33 | 0.069 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| Dichlorprop | <0.33 | | 0.33 | 0.090 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| 2,4-D | <0.33 | | 0.33 | 0.094 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| Silvex (2,4,5-TP) | <0.33 | | 0.33 | 0.085 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| 2,4,5-T | <0.33 | | 0.33 | 0.081 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |
| 2,4-DB | <0.33 | | 0.33 | 0.098 | mg/Kg | | 11/08/17 22:08 | 11/10/17 02:41 | 10 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------|--------------|--------------|----------|----------------|----------------|---------|
| DCAA | 50 | | 25 - 120 | 11/08/17 22:08 | 11/10/17 02:41 | 10 |

Lab Sample ID: LCS 500-409129/2-A
Matrix: Solid
Analysis Batch: 409021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409129

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------|-------------|------------|---------------|-------|---|------|--------------|
| Dicamba | 1.33 | 0.790 | | mg/Kg | | 59 | 25 - 110 |
| Dichlorprop | 1.34 | 0.771 | | mg/Kg | | 58 | 25 - 110 |
| 2,4-D | 1.33 | 0.618 | | mg/Kg | | 46 | 20 - 115 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 500-409129/2-A
Matrix: Solid
Analysis Batch: 409021

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409129

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-------------------|-------------|------------|---------------|-------|---|------|--------------|
| Silvex (2,4,5-TP) | 1.34 | 0.784 | | mg/Kg | | 59 | 29 - 115 |
| 2,4,5-T | 1.33 | 0.848 | | mg/Kg | | 64 | 25 - 115 |
| 2,4-DB | 1.33 | 0.897 | | mg/Kg | | 67 | 20 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------|---------------|---------------|----------|
| DCAA | 55 | | 25 - 120 |

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-408293/1-A
Matrix: Solid
Analysis Batch: 408472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|------|-------|-------|---|----------------|----------------|---------|
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Cadmium | 0.0379 | J | 0.20 | 0.036 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/03/17 07:41 | 11/03/17 16:14 | 1 |

Lab Sample ID: MB 500-408293/1-A
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-----|------|-------|---|----------------|----------------|---------|
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/03/17 07:41 | 11/05/17 22:24 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/03/17 07:41 | 11/05/17 22:24 | 1 |

Lab Sample ID: LCS 500-408293/2-A
Matrix: Solid
Analysis Batch: 408472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|-------|---|------|--------------|
| Arsenic | 10.0 | 9.07 | | mg/Kg | | 91 | 80 - 120 |
| Barium | 200 | 183 | | mg/Kg | | 91 | 80 - 120 |
| Beryllium | 5.00 | 4.82 | | mg/Kg | | 96 | 80 - 120 |
| Cadmium | 5.00 | 4.53 | | mg/Kg | | 91 | 80 - 120 |
| Chromium | 20.0 | 20.7 | | mg/Kg | | 104 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-408293/2-A
Matrix: Solid
Analysis Batch: 408472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|-------|---|------|----------|
| Cobalt | 50.0 | 48.1 | | mg/Kg | | 96 | 80 - 120 |
| Copper | 25.0 | 25.1 | | mg/Kg | | 100 | 80 - 120 |
| Iron | 100 | 112 | | mg/Kg | | 112 | 80 - 120 |
| Lead | 10.0 | 9.53 | | mg/Kg | | 95 | 80 - 120 |
| Manganese | 50.0 | 48.8 | | mg/Kg | | 98 | 80 - 120 |
| Nickel | 50.0 | 47.5 | | mg/Kg | | 95 | 80 - 120 |
| Silver | 5.00 | 4.88 | | mg/Kg | | 98 | 80 - 120 |
| Thallium | 10.0 | 9.01 | | mg/Kg | | 90 | 80 - 120 |
| Vanadium | 50.0 | 50.2 | | mg/Kg | | 100 | 80 - 120 |
| Zinc | 50.0 | 51.8 | | mg/Kg | | 104 | 80 - 120 |

Lab Sample ID: LCS 500-408293/2-A
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|-------|---|------|----------|
| Antimony | 50.0 | 47.7 | | mg/Kg | | 95 | 80 - 120 |
| Selenium | 10.0 | 8.67 | | mg/Kg | | 87 | 80 - 120 |

Lab Sample ID: 500-136651-1 MS
Matrix: Solid
Analysis Batch: 408472

Client Sample ID: 3160-55-1 (0-3)
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Chromium | 17 | | 11.8 | 30.8 | | mg/Kg | ☼ | 118 | 75 - 125 |
| Cobalt | 9.4 | | 29.4 | 35.8 | | mg/Kg | ☼ | 90 | 75 - 125 |
| Copper | 11 | F1 | 14.7 | 27.1 | | mg/Kg | ☼ | 108 | 75 - 125 |
| Lead | 14 | F2 F1 | 5.89 | 16.1 | F1 | mg/Kg | ☼ | 30 | 75 - 125 |
| Nickel | 19 | | 29.4 | 46.1 | | mg/Kg | ☼ | 91 | 75 - 125 |
| Silver | <0.27 | F1 | 2.94 | 1.99 | F1 | mg/Kg | ☼ | 68 | 75 - 125 |
| Thallium | <0.54 | F1 | 5.89 | 4.71 | | mg/Kg | ☼ | 80 | 75 - 125 |
| Vanadium | 28 | | 29.4 | 55.1 | | mg/Kg | ☼ | 92 | 75 - 125 |
| Zinc | 54 | F1 | 29.4 | 91.6 | F1 | mg/Kg | ☼ | 127 | 75 - 125 |

Lab Sample ID: 500-136651-1 MS
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: 3160-55-1 (0-3)
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|-------|---|-------|----------|
| Antimony | <5.4 | F1 | 29.4 | 4.57 | J F1 | mg/Kg | ☼ | 16 | 75 - 125 |
| Arsenic | 8.2 | F1 | 5.89 | 14.0 | | mg/Kg | ☼ | 98 | 75 - 125 |
| Barium | 100 | F1 F2 | 118 | 381 | F1 | mg/Kg | ☼ | 237 | 75 - 125 |
| Beryllium | 1.0 | J | 2.94 | 3.81 | | mg/Kg | ☼ | 95 | 75 - 125 |
| Cadmium | 0.14 | J | 2.94 | 3.12 | | mg/Kg | ☼ | 101 | 75 - 125 |
| Iron | 25000 | | 58.9 | 27100 | 4 | mg/Kg | ☼ | 2936 | 75 - 125 |
| Manganese | 600 | F2 | 29.4 | 294 | 4 | mg/Kg | ☼ | -1055 | 75 - 125 |
| Selenium | <2.7 | F1 | 5.89 | 7.52 | F1 | mg/Kg | ☼ | 128 | 75 - 125 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136651-1 MSD

Matrix: Solid

Analysis Batch: 408472

Client Sample ID: 3160-55-1 (0-3)

Prep Type: Total/NA

Prep Batch: 408293

| Analyte | Sample | Sample | Spike | MSD | | Unit | D | %Rec | Limits | RPD | Limit |
|----------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | | | |
| Chromium | 17 | | 11.2 | 29.7 | | mg/Kg | ☼ | 114 | 75 - 125 | 4 | 20 |
| Cobalt | 9.4 | | 27.9 | 33.3 | | mg/Kg | ☼ | 86 | 75 - 125 | 7 | 20 |
| Copper | 11 | F1 | 13.9 | 28.9 | F1 | mg/Kg | ☼ | 127 | 75 - 125 | 6 | 20 |
| Lead | 14 | F2 F1 | 5.58 | 20.8 | F2 | mg/Kg | ☼ | 117 | 75 - 125 | 26 | 20 |
| Nickel | 19 | | 27.9 | 41.7 | | mg/Kg | ☼ | 81 | 75 - 125 | 10 | 20 |
| Silver | <0.27 | F1 | 2.79 | 2.13 | | mg/Kg | ☼ | 77 | 75 - 125 | 7 | 20 |
| Thallium | <0.54 | F1 | 5.58 | 4.14 | F1 | mg/Kg | ☼ | 74 | 75 - 125 | 13 | 20 |
| Vanadium | 28 | | 27.9 | 55.6 | | mg/Kg | ☼ | 99 | 75 - 125 | 1 | 20 |
| Zinc | 54 | F1 | 27.9 | 91.3 | F1 | mg/Kg | ☼ | 133 | 75 - 125 | 0 | 20 |

Lab Sample ID: 500-136651-1 MSD

Matrix: Solid

Analysis Batch: 408545

Client Sample ID: 3160-55-1 (0-3)

Prep Type: Total/NA

Prep Batch: 408293

| Analyte | Sample | Sample | Spike | MSD | | Unit | D | %Rec | Limits | RPD | Limit |
|-----------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | | | |
| Antimony | <5.4 | F1 | 27.9 | 4.79 | J F1 | mg/Kg | ☼ | 17 | 75 - 125 | 5 | 20 |
| Arsenic | 8.2 | F1 | 5.58 | 16.9 | F1 | mg/Kg | ☼ | 156 | 75 - 125 | 19 | 20 |
| Barium | 100 | F1 F2 | 112 | 218 | F2 | mg/Kg | ☼ | 105 | 75 - 125 | 54 | 20 |
| Beryllium | 1.0 | J | 2.79 | 3.46 | | mg/Kg | ☼ | 88 | 75 - 125 | 9 | 20 |
| Cadmium | 0.14 | J | 2.79 | 2.80 | | mg/Kg | ☼ | 95 | 75 - 125 | 11 | 20 |
| Iron | 25000 | | 55.8 | 30200 | 4 | mg/Kg | ☼ | 8632 | 75 - 125 | 11 | 20 |
| Manganese | 600 | F2 | 27.9 | 383 | 4 F2 | mg/Kg | ☼ | -795 | 75 - 125 | 26 | 20 |
| Selenium | <2.7 | F1 | 5.58 | 7.13 | F1 | mg/Kg | ☼ | 128 | 75 - 125 | 5 | 20 |

Lab Sample ID: 500-136651-1 DU

Matrix: Solid

Analysis Batch: 408472

Client Sample ID: 3160-55-1 (0-3)

Prep Type: Total/NA

Prep Batch: 408293

| Analyte | Sample | Sample | DU | DU | | Unit | D | RPD | Limit |
|----------|--------|-----------|-------|--------|-----------|-------|---|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | |
| Chromium | 17 | | 16.1 | | | mg/Kg | ☼ | 5 | 20 |
| Cobalt | 9.4 | | 6.36 | F3 | | mg/Kg | ☼ | 39 | 20 |
| Copper | 11 | F1 | 12.5 | | | mg/Kg | ☼ | 11 | 20 |
| Lead | 14 | F2 F1 | 11.1 | F3 | | mg/Kg | ☼ | 25 | 20 |
| Nickel | 19 | | 16.7 | | | mg/Kg | ☼ | 14 | 20 |
| Silver | <0.27 | F1 | <0.29 | | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.54 | F1 | <0.58 | | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 28 | | 23.0 | | | mg/Kg | ☼ | 19 | 20 |
| Zinc | 54 | F1 | 54.8 | | | mg/Kg | ☼ | 0.8 | 20 |

Lab Sample ID: 500-136651-1 DU

Matrix: Solid

Analysis Batch: 408545

Client Sample ID: 3160-55-1 (0-3)

Prep Type: Total/NA

Prep Batch: 408293

| Analyte | Sample | Sample | DU | DU | | Unit | D | RPD | Limit |
|-----------|--------|-----------|-------|--------|-----------|-------|---|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | |
| Antimony | <5.4 | F1 | <5.8 | | | mg/Kg | ☼ | NC | 20 |
| Arsenic | 8.2 | F1 | 7.38 | | | mg/Kg | ☼ | 11 | 20 |
| Barium | 100 | F1 F2 | 103 | | | mg/Kg | ☼ | 1 | 20 |
| Beryllium | 1.0 | J | 0.694 | J F5 | | mg/Kg | ☼ | 36 | 20 |
| Cadmium | 0.14 | J | <0.58 | | | mg/Kg | ☼ | NC | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136651-1 DU
Matrix: Solid
Analysis Batch: 408545

Client Sample ID: 3160-55-1 (0-3)
Prep Type: Total/NA
Prep Batch: 408293

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|-----------|--------|-----------|--------|-----------|-------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Iron | 25000 | | 21300 | | mg/Kg | ✱ | 17 | 20 |
| Manganese | 600 | F2 | 222 | F3 | mg/Kg | ✱ | 92 | 20 |
| Selenium | <2.7 | F1 | 2.71 | J | mg/Kg | ✱ | NC | 20 |

Lab Sample ID: LCS 500-408611/2-A
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408611
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| | | | | | | | |
| Manganese | 0.500 | 0.473 | | mg/L | | 95 | 80 - 120 |

Lab Sample ID: LCS 500-408617/2-A
Matrix: Solid
Analysis Batch: 408949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408617
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| | | | | | | | |
| Barium | 0.500 | 0.524 | | mg/L | | 105 | 80 - 120 |
| Beryllium | 0.0500 | 0.0476 | | mg/L | | 95 | 80 - 120 |
| Cadmium | 0.0500 | 0.0498 | | mg/L | | 100 | 80 - 120 |
| Chromium | 0.200 | 0.202 | | mg/L | | 101 | 80 - 120 |
| Cobalt | 0.500 | 0.492 | | mg/L | | 98 | 80 - 120 |
| Copper | 0.250 | 0.279 | | mg/L | | 112 | 80 - 120 |
| Iron | 1.00 | 1.17 | | mg/L | | 117 | 80 - 120 |
| Lead | 0.100 | 0.0887 | | mg/L | | 89 | 80 - 120 |
| Manganese | 0.500 | 0.487 | | mg/L | | 97 | 80 - 120 |
| Nickel | 0.500 | 0.494 | | mg/L | | 99 | 80 - 120 |
| Selenium | 0.100 | 0.0913 | | mg/L | | 91 | 80 - 120 |
| Silver | 0.0500 | 0.0475 | | mg/L | | 95 | 80 - 120 |
| Vanadium | 0.500 | 0.496 | | mg/L | | 99 | 80 - 120 |
| Zinc | 0.500 | 0.469 | J | mg/L | | 94 | 80 - 120 |

Lab Sample ID: LB 500-408395/1-B
Matrix: Solid
Analysis Batch: 408949

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408617

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-408395/1-B
Matrix: Solid
Analysis Batch: 408949

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408617

| Analyte | LB LB | | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/06/17 11:00 | 11/07/17 11:31 | 1 |

Lab Sample ID: 500-136651-17 MS
Matrix: Solid
Analysis Batch: 408949

Client Sample ID: 3160-62-1 (0-1.5')
Prep Type: TCLP
Prep Batch: 408617

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS MS | | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|--------|-----------|------|---|------|----------|
| | | | | Result | Qualifier | | | | |
| Arsenic | <0.050 | | 0.100 | 0.117 | | mg/L | | 117 | 50 - 150 |
| Barium | 0.72 | | 0.500 | 1.20 | | mg/L | | 96 | 50 - 150 |
| Beryllium | <0.0040 | | 0.0500 | 0.0505 | | mg/L | | 101 | 50 - 150 |
| Cadmium | 0.0026 | J | 0.0500 | 0.0613 | | mg/L | | 117 | 50 - 150 |
| Chromium | <0.025 | | 0.200 | 0.191 | | mg/L | | 95 | 50 - 150 |
| Cobalt | <0.025 | | 0.500 | 0.523 | | mg/L | | 105 | 50 - 150 |
| Copper | 0.018 | J | 0.250 | 0.329 | | mg/L | | 124 | 50 - 150 |
| Iron | 0.20 | J | 1.00 | 1.17 | | mg/L | | 97 | 50 - 150 |
| Lead | <0.0075 | | 0.100 | 0.0991 | | mg/L | | 99 | 50 - 150 |
| Manganese | 0.031 | | 0.500 | 0.501 | | mg/L | | 94 | 50 - 150 |
| Nickel | 0.010 | J | 0.500 | 0.519 | | mg/L | | 102 | 50 - 150 |
| Selenium | <0.050 | | 0.100 | 0.112 | | mg/L | | 112 | 50 - 150 |
| Silver | <0.025 | | 0.0500 | 0.0593 | | mg/L | | 119 | 50 - 150 |
| Vanadium | <0.025 | | 0.500 | 0.487 | | mg/L | | 97 | 50 - 150 |
| Zinc | 0.057 | J | 0.500 | 0.548 | | mg/L | | 98 | 50 - 150 |

Lab Sample ID: 500-136651-17 DU
Matrix: Solid
Analysis Batch: 408949

Client Sample ID: 3160-62-1 (0-1.5')
Prep Type: TCLP
Prep Batch: 408617

| Analyte | Sample Result | Sample Qualifier | DU DU | | Unit | D | RPD | |
|-----------|---------------|------------------|---------|-----------|------|---|-----|-------|
| | | | Result | Qualifier | | | RPD | Limit |
| Arsenic | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Barium | 0.72 | | 0.709 | | mg/L | | 1 | 20 |
| Beryllium | <0.0040 | | <0.0040 | | mg/L | | NC | 20 |
| Cadmium | 0.0026 | J | 0.00232 | J | mg/L | | 9 | 20 |
| Chromium | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Cobalt | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Copper | 0.018 | J | 0.0179 | J | mg/L | | 0.4 | 20 |
| Iron | 0.20 | J | <0.40 | | mg/L | | NC | 20 |
| Lead | <0.0075 | | <0.0075 | | mg/L | | NC | 20 |
| Manganese | 0.031 | | 0.0300 | | mg/L | | 2 | 20 |
| Nickel | 0.010 | J | <0.025 | | mg/L | | NC | 20 |
| Selenium | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Silver | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Vanadium | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Zinc | 0.057 | J | 0.0532 | J | mg/L | | 6 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-408390/1-B
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 408611

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/06/17 11:29 | 11/08/17 21:49 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/06/17 11:29 | 11/08/17 21:49 | 1 |

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-408617/2-A
Matrix: Solid
Analysis Batch: 408965

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408617
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.470 | | mg/L | | 94 | 80 - 120 |
| Thallium | 0.100 | 0.101 | | mg/L | | 101 | 80 - 120 |

Lab Sample ID: LB 500-408395/1-B
Matrix: Solid
Analysis Batch: 408965

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408617

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/06/17 11:00 | 11/07/17 15:32 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/06/17 11:00 | 11/07/17 15:32 | 1 |

Lab Sample ID: 500-136651-17 MS
Matrix: Solid
Analysis Batch: 408965

Client Sample ID: 3160-62-1 (0-1.5')
Prep Type: TCLP
Prep Batch: 408617
%Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Antimony | <0.0060 | | 0.500 | 0.468 | | mg/L | | 94 | 50 - 150 |
| Thallium | <0.0020 | | 0.100 | 0.106 | | mg/L | | 106 | 50 - 150 |

Lab Sample ID: 500-136651-17 DU
Matrix: Solid
Analysis Batch: 408965

Client Sample ID: 3160-62-1 (0-1.5')
Prep Type: TCLP
Prep Batch: 408617

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Antimony | <0.0060 | | <0.0060 | | mg/L | | NC | 20 |
| Thallium | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-408635/12-A
Matrix: Solid
Analysis Batch: 408771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408635

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:11 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-408635/13-A
Matrix: Solid
Analysis Batch: 408771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408635

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|------|---|------|----------|
| Mercury | 0.00200 | 0.00229 | | mg/L | | 114 | 80 - 120 |

Lab Sample ID: LB 500-408395/1-C
Matrix: Solid
Analysis Batch: 408771

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408635

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/06/17 14:30 | 11/07/17 09:14 | 1 |

Lab Sample ID: 500-136651-1 MS
Matrix: Solid
Analysis Batch: 408771

Client Sample ID: 3160-55-1 (0-3)
Prep Type: TCLP
Prep Batch: 408635

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Mercury | <0.00020 | | 0.00100 | 0.00109 | | mg/L | | 109 | 50 - 150 |

Lab Sample ID: 500-136651-1 DU
Matrix: Solid
Analysis Batch: 408771

Client Sample ID: 3160-55-1 (0-3)
Prep Type: TCLP
Prep Batch: 408635

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Mercury | <0.00020 | | <0.00020 | | mg/L | | NC | 20 |

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-408396/12-A
Matrix: Solid
Analysis Batch: 408625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408396

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/03/17 15:15 | 11/06/17 11:12 | 1 |

Lab Sample ID: LCS 500-408396/13-A
Matrix: Solid
Analysis Batch: 408625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408396

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.157 | | mg/Kg | | 94 | 80 - 120 |

Lab Sample ID: 500-136651-9 MS
Matrix: Solid
Analysis Batch: 408625

Client Sample ID: 3160-62-9 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408396

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Mercury | 0.021 | | 0.100 | 0.106 | | mg/Kg | ☼ | 85 | 75 - 125 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-136651-9 MSD
Matrix: Solid
Analysis Batch: 408625

Client Sample ID: 3160-62-9 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408396

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-----------|
| Mercury | 0.021 | | 0.104 | 0.111 | | mg/Kg | ☼ | 87 | 75 - 125 | 4 | 20 |

Lab Sample ID: 500-136651-9 DU
Matrix: Solid
Analysis Batch: 408625

Client Sample ID: 3160-62-9 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408396

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|-------|---|-----|-----------|
| Mercury | 0.021 | | 0.0287 | F5 | mg/Kg | ☼ | 31 | 20 |

Method: 9045D - pH

Lab Sample ID: 500-136651-1 DU
Matrix: Solid
Analysis Batch: 409062

Client Sample ID: 3160-55-1 (0-3)
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 5.2 | | 5.21 | | SU | | 0.2 | |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 13:32 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 15:41 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:16 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-55-1 (0-3)

Lab Sample ID: 500-136651-1

Date Collected: 11/01/17 08:05

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 12:51 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 05:00 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8081B | | 1 | 409066 | 11/08/17 22:14 | PJG | TAL CHI |
| Total/NA | Prep | 8151A | | | 409129 | 11/08/17 22:08 | NRJ | TAL CHI |
| Total/NA | Analysis | 8151A | | 10 | 409021 | 11/10/17 04:42 | JBj | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 16:22 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 5 | 408545 | 11/05/17 22:40 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:21 | EEN | TAL CHI |

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 11:43 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 15:46 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:21 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | (Start) 11/08/17 17:14 (End) 11/08/17 15:05 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-55-2 (0-3)

Lab Sample ID: 500-136651-2

Date Collected: 11/01/17 08:15

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 13:41 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 12:58 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8081B | | 1 | 409066 | 11/08/17 22:35 | PJG | TAL CHI |
| Total/NA | Prep | 8151A | | | 409129 | 11/08/17 22:08 | NRJ | TAL CHI |
| Total/NA | Analysis | 8151A | | 10 | 409021 | 11/10/17 05:06 | JBj | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 16:42 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:00 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:23 | EEN | TAL CHI |

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408390 | 11/03/17 13:52 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408611 | 11/06/17 11:29 | PFK | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409155 | 11/08/17 21:57 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 11:47 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 15:50 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:22 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | 11/08/17 17:14 (Start) 11/08/17 15:05 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-56-1 (0-1.5')

Lab Sample ID: 500-136651-3

Date Collected: 11/01/17 08:25

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 87.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 14:07 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 05:28 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8081B | | 10 | 409066 | 11/08/17 22:55 | PJG | TAL CHI |
| Total/NA | Prep | 8151A | | | 409129 | 11/08/17 22:08 | NRJ | TAL CHI |
| Total/NA | Analysis | 8151A | | 10 | 409021 | 11/10/17 05:31 | JBj | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 16:46 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:04 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:26 | EEN | TAL CHI |

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 11:51 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 15:55 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:27 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | 11/08/17 17:14 (Start) 11/08/17 15:05 (End) | SMO | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-56-2 (0-1.5')

Lab Sample ID: 500-136651-4

Date Collected: 11/01/17 08:35

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 14:32 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 18:12 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8081B | | 10 | 409066 | 11/08/17 23:15 | PJG | TAL CHI |
| Total/NA | Prep | 8151A | | | 409129 | 11/08/17 22:08 | NRJ | TAL CHI |
| Total/NA | Analysis | 8151A | | 10 | 409021 | 11/10/17 05:55 | JBj | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 16:50 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:08 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:28 | EEN | TAL CHI |

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

Date Collected: 11/01/17 08:50

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408390 | 11/03/17 13:52 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408611 | 11/06/17 11:29 | PFK | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409155 | 11/08/17 22:01 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 11:55 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:00 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:28 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-1 (0-1.5')

Lab Sample ID: 500-136651-5

Date Collected: 11/01/17 08:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 14:57 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 05:55 | WDS | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 12:57 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:03 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:24 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:30 | EEN | TAL CHI |

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:08 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:04 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:29 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 15:22 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 16:28 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 13:13 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-2 (0-1.5')

Lab Sample ID: 500-136651-6

Date Collected: 11/01/17 09:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:07 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:28 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:33 | EEN | TAL CHI |

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408390 | 11/03/17 13:52 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408611 | 11/06/17 11:29 | PFK | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409155 | 11/08/17 22:13 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:12 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:09 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:31 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 83.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 15:47 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 16:54 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 408939 | 11/08/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 409181 | 11/09/17 13:28 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:11 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:32 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-64-3 (0-1.5')

Lab Sample ID: 500-136651-7

Date Collected: 11/01/17 09:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 83.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:35 | EEN | TAL CHI |

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

Date Collected: 11/01/17 09:20

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:16 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:14 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:32 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | (Start) 11/08/17 17:14 (End) 11/08/17 15:05 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-10 (0-1.5')

Lab Sample ID: 500-136651-8

Date Collected: 11/01/17 09:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 79.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 16:12 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 17:20 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:15 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:36 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:37 | EEN | TAL CHI |

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:21 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:28 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:34 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-9 (0-1.5')

Lab Sample ID: 500-136651-9

Date Collected: 11/01/17 09:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 77.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 16:37 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409783 | 11/13/17 18:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409829 | 11/14/17 11:57 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:19 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:40 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:39 | EEN | TAL CHI |

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408390 | 11/03/17 13:52 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408611 | 11/06/17 11:29 | PFK | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409155 | 11/08/17 22:17 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:25 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:32 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:35 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | (Start) 11/08/17 17:14 (End) 11/08/17 15:05 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-8 (0-1.5')

Lab Sample ID: 500-136651-10

Date Collected: 11/01/17 09:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 82.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 17:03 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 13:51 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:23 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:44 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:53 | EEN | TAL CHI |

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

Date Collected: 11/01/17 09:50

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:29 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:37 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:37 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | (Start) 11/08/17 17:14 (End) 11/08/17 15:05 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-7 (0-1.5')

Lab Sample ID: 500-136651-11

Date Collected: 11/01/17 09:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 84.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 17:28 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 15:35 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:26 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:48 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:55 | EEN | TAL CHI |

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:40 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:41 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:38 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 17:53 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 16:02 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:30 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:51 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-6 (0-1.5')

Lab Sample ID: 500-136651-12

Date Collected: 11/01/17 10:00

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 81.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 11:57 | EEN | TAL CHI |

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

Date Collected: 11/01/17 10:10

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:44 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:46 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:40 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | (Start) 11/08/17 17:14 (End) 11/08/17 15:05 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-5 (0-1.5')

Lab Sample ID: 500-136651-13

Date Collected: 11/01/17 10:10

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 78.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 18:18 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409783 | 11/13/17 18:14 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409829 | 11/14/17 12:23 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:34 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:55 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 12:00 | EEN | TAL CHI |

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 12:49 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:51 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:44 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-4 (0-1.5')

Lab Sample ID: 500-136651-14

Date Collected: 11/01/17 10:20

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 80.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 18:43 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 14:43 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:38 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/05/17 23:59 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 12:02 | EEN | TAL CHI |

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 13:08 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 16:55 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:45 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 409062 | 11/08/17 17:14 (Start) 11/08/17 15:05 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-3 (0-1.5')

Lab Sample ID: 500-136651-15

Date Collected: 11/01/17 11:30

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 19:08 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 15:09 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:51 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/06/17 00:11 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 12:04 | EEN | TAL CHI |

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

Date Collected: 11/01/17 11:40

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 408390 | 11/03/17 13:52 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 408611 | 11/06/17 11:29 | PFK | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409155 | 11/08/17 22:21 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 13:12 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 17:00 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:47 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | 11/08/17 17:14 (Start) 11/08/17 15:05 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-2 (0-1.5')

Lab Sample ID: 500-136651-16

Date Collected: 11/01/17 11:40

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 90.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 19:33 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409157 | 11/09/17 17:46 | AJD | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:55 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/06/17 00:15 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 12:07 | EEN | TAL CHI |

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 408949 | 11/07/17 13:16 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 408617 | 11/06/17 11:00 | PFK | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 408965 | 11/07/17 17:14 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408395 | 11/03/17 13:52 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 408635 | 11/06/17 14:30 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 408771 | 11/07/17 09:48 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409062 | | SMO | TAL CHI |
| | | | | | (Start) | 11/08/17 17:14 | | |
| | | | | | (End) | 11/08/17 15:05 | | |
| Total/NA | Analysis | Moisture | | 1 | 408249 | 11/02/17 15:52 | LWN | TAL CHI |

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408513 | 11/02/17 18:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408943 | 11/08/17 19:59 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409105 | 11/08/17 17:13 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409657 | 11/13/17 15:12 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408472 | 11/03/17 17:59 | KML | TAL CHI |
| Total/NA | Prep | 3050B | | | 408293 | 11/03/17 07:41 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408545 | 11/06/17 00:19 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408396 | 11/03/17 15:15 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Client Sample ID: 3160-62-1 (0-1.5')

Lab Sample ID: 500-136651-17

Date Collected: 11/01/17 11:50

Matrix: Solid

Date Received: 11/02/17 09:00

Percent Solids: 85.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 7471B | | 1 | 408625 | 11/06/17 12:09 | EEN | TAL CHI |

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

- 1
- 2
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- 5
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- 14

Accreditation/Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136651-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| Illinois | NELAP | 5 | 100201 | 04-30-18 |

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|----------------------------|
| 6020A | 3010A | Solid | Antimony |
| 6020A | 3010A | Solid | Thallium |
| 8260B | 5035 | Solid | 1,3-Dichloropropene, Total |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6C
Phone: 708.534.5200 Fax: 708.534



500-136651 COC

Report To (optional)
Contact: TERRY DIXON
Company: Amec-fw wood
Address: 4232 BRANDYWINZ
Address: PEORIA, IL 61614
Phone: 531.2.E.A
Fax: 309-692-4422
E-Mail:

Bill To (optional)
Contact: JAMIE
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-136651

Chain of Custody Number: _____

Page _____ of _____

Temperature °C of Cooler: 19.45

| Client | | Client Project # | | Preservative | | Parameter | | VEG's | | SVOC's | | PCB | | TOTAL METALS | | TECP METALS | | SPLP METALS | | PH | | % Solids | | PEST/HERB | | Preservative Key | |
|--------------------|--|------------------------|------|---------------|---|-----------------|---|--------|---|--------|--|-----|---|--------------|---|-------------|---|-------------|---|----|---|----------|---|-----------|--|--|---------------|
| Amec-fw wood | | 3160150049 | | | | | | | | | | | | | | | | | | | | | | | | <ol style="list-style-type: none"> HCL, Cool to 4° H2SO4, Cool to 4° HNO3, Cool to 4° NaOH, Cool to 4° NaOH/Zn, Cool to 4° NaHSO4 Cool to 4° None Other | |
| Project Name | | Project Location/State | | Lab Project # | | Lab PM | | | | | | | | | | | | | | | | | | | | Comments | |
| IDOT NO 28 IL RT37 | | Benton, IL | | 50013898 | | DICK WRIGHT | | | | | | | | | | | | | | | | | | | | | |
| Sampler | | Sample ID | | Sampling | | # of Containers | | Matrix | | | | | | | | | | | | | | | | | | | |
| Tom McWally | | | | Date Time | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | 3160-55-1 (0-3) | 11/1 | 0805 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | HOLD SPLP |
| 2 | | 3160-55-2 (0-3) | 11/1 | 0815 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | BASED ON TECP |
| 3 | | 3160-56-1 (0-1.5') | 11/1 | 0825 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | RESULTS, |
| 4 | | 3160-56-2 (0-1.5') | 11/1 | 0835 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 5 | | 3160-64-1 (0-1.5') | 11/1 | 0850 | 6 | S | X | X | X | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | SEE DIXON |
| 6 | | 3160-64-2 (0-1.5') | 11/1 | 0900 | 6 | S | X | X | X | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | EMAIL RE: |
| 7 | | 3160-64-3 (0-1.5') | 11/1 | 0910 | 6 | S | X | X | X | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | 18 METALS |
| 8 | | 3160-62-10 (0-1.5') | 11/1 | 0920 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | LIST |
| 9 | | 3160-6209 (0-1.5') | 11/1 | 0930 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 10 | | 3160-6208 (0-1.5') | 11/1 | 0940 | 6 | S | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | |

Turnaround Time Required (Business Days) _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

| | |
|---|--|
| Relinquished By: <u>[Signature]</u> Company: <u>Amec-fw wood</u> Date: <u>11/1</u> Time: <u>1600</u> | Received By: <u>[Signature]</u> Company: <u>Amec-fw wood</u> Date: <u>11/2/17</u> Time: <u>0900</u> |
| Relinquished By: _____ Company: _____ Date: _____ Time: _____ | Received By: _____ Company: _____ Date: _____ Time: _____ |
| Relinquished By: _____ Company: _____ Date: _____ Time: _____ | Received By: _____ Company: _____ Date: _____ Time: _____ |

Lab Courier: _____
 Shipped: FedEx
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: TERRY DIXON
 Company: AMELW WOOD
 Address: 4232 BRANDYWINE
 Address: SUIT 3 A PEORIA IL
 Phone: 61614
 Fax: 309-692-4422
 E-Mail: _____

Bill To (optional)
 Contact: US Army
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-136651
 Chain of Custody Number: _____
 Page 2 of _____
 Temperature °C of Cooler: 19.45

| Client | | Client Project # | | Preservative | | Parameter | | | | | | | | | | | | Preservative Key | |
|--------------------------|---------------|---------------------------|-------------|-----------------|----------|-----------|----------|----------|------------|--------------|---------------|--------------------|-------------------|-----------|------------------|------------------|--------------|---|--|
| <u>AMELW WOOD</u> | | <u>3160150049</u> | | | | | | | | | | | | | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | |
| Project Name | | Lab Project # | | # of Containers | | Matrix | | | | | | | | | | | | Comments | |
| <u>DOT W028 IL Rt 37</u> | | <u>50013898</u> | | | | | | | | | | | | | | | | | |
| Project Location/State | | Lab PM | | Date | | Time | | | | | | | | | | | | | |
| <u>BENTON, IL</u> | | <u>DICK WRIGHT</u> | | | | | | | | | | | | | | | | | |
| Sampler | | Sample ID | | | | | | | | | | | | | | | | | |
| <u>Tom McNally</u> | | | | | | | | | | | | | | | | | | | |
| <u>11</u> | <u>MS/MSD</u> | <u>3160-62-7 (0-1.5')</u> | <u>11/1</u> | <u>0950</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | <u>PCB</u> | <u>TOTAL</u> | <u>metals</u> | <u>TELE METALS</u> | <u>SPL METALS</u> | <u>PH</u> | <u>90 Solids</u> | <u>PEST/HERB</u> | | <u>SEE PAGE 1</u> | |
| <u>12</u> | | <u>3160-62-6 (0-1.5')</u> | <u>11/1</u> | <u>1000</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | <u>NOTES</u> | | |
| <u>13</u> | | <u>3160-62-5 (0-1.5')</u> | <u>11/1</u> | <u>1010</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | | | |
| <u>14</u> | | <u>3160-62-4 (0-1.5')</u> | <u>11/1</u> | <u>1020</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | | | |
| <u>15</u> | | <u>3160-62-3 (0-1.5')</u> | <u>11/1</u> | <u>1130</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | | | |
| <u>16</u> | | <u>3160-62-2 (0-1.5')</u> | <u>11/1</u> | <u>1140</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | | | |
| <u>17</u> | | <u>3160-62-1 (0-1.5')</u> | <u>11/1</u> | <u>1150</u> | <u>6</u> | <u>5</u> | <u>X</u> | <u>X</u> | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | | | |

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days 20+ days Other _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|---------------------------------------|------------------------------|------------------------|---------------------|-----------------------------------|--------------------------|------------------------|---------------------|
| Relinquished By <u>[Signature]</u> | Company <u>AMELW WOOD</u> | Date <u>11/1/17</u> | Time <u>1600</u> | Received By <u>[Signature]</u> | Company <u>TA-CHI</u> | Date <u>11/2/17</u> | Time <u>0900</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |

Lab Courier: _____
 Shipped: FedEx
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-136651-1

Login Number: 136651

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is <=/ background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 1.9,4.5 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-136756-1
Client Project/Site: IDOT - Benton - WO 028

For:
AMEC Foster Wheeler E & I, Inc
4232 Brandywine Drive
Suite A
Peoria, Illinois 61614

Attn: Mr. Terry Dixon



Authorized for release by:
11/15/2017 11:56:02 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Job ID: 500-136756-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-136756-1

Receipt

The samples were received on 11/3/2017 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.1° C, 2.4° C, 2.6° C and 3.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-136756-F-1-L MS) and (500-136756-F-1-M MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.016 | J | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.043 | | 0.038 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.049 | | 0.038 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.043 | | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.019 | J | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.039 | | 0.038 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.024 | J | 0.038 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.038 | | 0.038 | 0.0098 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.022 | J | 0.077 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0097 | J | 0.038 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.038 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.029 | J | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.43 | J F1 | 1.1 | 0.22 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 6.8 | F1 | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 89 | F1 | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.49 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.24 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | F1 | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.2 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 99 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 200 | F2 | 0.56 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.49 | J F1 | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 22 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 66 | F1 | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.70 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.33 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.031 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.016 | J | 0.018 | 0.0061 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.031 | J | 0.038 | 0.0065 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.098 | | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.13 | | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.15 | | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.10 | | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.038 | | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.12 | | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.050 | | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.073 | J | 0.19 | 0.045 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.14 | | 0.038 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluorene | 0.0059 | J | 0.038 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.079 | | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.14 | | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.063 | | 0.038 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-2 (0-1.5') (Continued)

Lab Sample ID: 500-136756-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Phenanthrene | 0.25 | | 0.038 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.20 | | 0.038 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.4 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 82 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.68 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.45 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 21 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.6 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 17000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 290 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 360 | | 0.56 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.63 | | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 20 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 110 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.85 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.20 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.022 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.049 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.023 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.025 | J | 0.041 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.049 | | 0.041 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.066 | | 0.041 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.073 | | 0.041 | 0.0089 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.054 | | 0.041 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.015 | J | 0.041 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.053 | | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.054 | J | 0.21 | 0.048 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.060 | | 0.041 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.046 | | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.099 | | 0.083 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.044 | | 0.041 | 0.0063 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.17 | | 0.041 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.068 | | 0.041 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.3 | | 0.62 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 88 | | 0.62 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.52 | | 0.25 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.29 | | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | | 0.62 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.7 | | 0.31 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.62 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 12 | 6.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 69 | | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 340 | | 0.62 | 0.090 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-1 (0-1.5') (Continued)

Lab Sample ID: 500-136756-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Nickel | 13 | | 0.62 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.59 | J | 0.62 | 0.37 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 24 | | 0.31 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 78 | | 1.2 | 0.55 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.37 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 3.5 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Lead | 0.011 | | 0.0075 | 0.0075 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.040 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.061 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Lead | 0.21 | | 0.0075 | 0.0075 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.035 | | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Arsenic | 5.9 | | 0.59 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 35 | | 0.59 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.44 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.023 | J | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.59 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 3.4 | | 0.30 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 10 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | | 12 | 6.2 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 12 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 84 | | 0.59 | 0.086 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 7.3 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.52 | J | 0.59 | 0.35 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 29 | | 0.30 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 27 | | 1.2 | 0.52 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.21 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.20 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.054 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.030 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.016 | J | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.0059 | J | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.032 | J | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.032 | J | 0.039 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.010 | J | 0.080 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.018 | J | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 6.7 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.45 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.12 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-10 (0-3') (Continued)

Lab Sample ID: 500-136756-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Chromium | 17 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.5 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 17 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 27 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 220 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.39 | J | 0.55 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 23 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 66 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.042 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.65 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.041 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.086 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.011 | J | 0.018 | 0.0058 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acenaphthene | 0.010 | J | 0.038 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Acenaphthylene | 0.0090 | J | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Anthracene | 0.051 | | 0.038 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.15 | | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.17 | | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.21 | | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.11 | | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.069 | | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.18 | | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.054 | | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.15 | J | 0.19 | 0.045 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.24 | | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.095 | | 0.038 | 0.0099 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.26 | | 0.077 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.11 | | 0.038 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.44 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.22 | | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 10 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 91 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.63 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.82 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 18 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.5 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 25 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 250 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 410 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.0 | | 0.55 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-9 (0-3') (Continued)

Lab Sample ID: 500-136756-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Vanadium | 21 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 180 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.47 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0036 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.040 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.30 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Lead | 0.019 | | 0.0075 | 0.0075 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.038 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 1.4 | | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Lead | 0.40 | | 0.0075 | 0.0075 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.039 | | 0.018 | 0.0059 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.7 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.013 | J | 0.039 | 0.0065 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.042 | | 0.039 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.064 | | 0.039 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.076 | | 0.039 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.049 | | 0.039 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.017 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.048 | | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.063 | | 0.039 | 0.0072 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.046 | | 0.039 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.058 | J | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.026 | J | 0.039 | 0.0060 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.097 | | 0.039 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.069 | | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 8.1 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 300 | | 0.56 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.74 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.55 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 11 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 27 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 47 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 3700 | | 5.6 | 0.81 | mg/Kg | 10 | ☼ | 6010B | Total/NA |
| Nickel | 21 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 1.2 | | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Thallium | 1.1 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 19 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 60 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.61 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.37 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.045 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.037 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-8 (0-3') (Continued)

Lab Sample ID: 500-136756-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|------|------|------|---------|---|--------|-----------|
| pH | 7.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.036 | | 0.020 | 0.0085 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 7.9 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 51 | | 0.61 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.53 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.024 | J | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 18 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 4.7 | | 0.30 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 14 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 140 | | 0.61 | 0.088 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.63 | | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 31 | | 0.30 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 53 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.21 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.71 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.23 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.024 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.039 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.26 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.011 | J | 0.020 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|-------|-------|---------|---|--------|-----------|
| Arsenic | 8.5 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 52 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.52 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 18 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.0 | | 0.27 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 22000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.27 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 120 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.93 | | 0.55 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 31 | | 0.27 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 53 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.22 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.013 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.024 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.98 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-6 (0-3') (Continued)

Lab Sample ID: 500-136756-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Manganese | 0.21 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.028 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.080 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.078 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.043 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Arsenic | 7.2 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 120 | | 0.61 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.51 | | 0.25 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.074 | J | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 17 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.5 | | 0.31 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | | 12 | 6.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 150 | | 0.61 | 0.089 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 16 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.62 | | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 30 | | 0.31 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 76 | | 1.2 | 0.54 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.40 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0025 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Cobalt | 0.017 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.68 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.28 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.029 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.53 | | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.073 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.016 | J | 0.019 | 0.0062 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|------|-------|-------|---------|---|--------|-----------|
| Antimony | 0.38 | J | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 9.3 | | 0.60 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 100 | | 0.60 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.46 | | 0.24 | 0.056 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.60 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.1 | | 0.30 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 10 | | 0.60 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 23 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 820 | | 0.60 | 0.088 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 10 | | 0.60 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-4 (0-3') (Continued)

Lab Sample ID: 500-136756-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Selenium | 0.92 | | 0.60 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 33 | | 0.30 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 40 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.45 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.29 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.15 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.022 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.034 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.034 | | 0.021 | 0.0070 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.028 | | 0.018 | 0.0080 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 6.6 | | 0.55 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 49 | | 0.55 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.32 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.55 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 3.2 | | 0.28 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 7.4 | | 0.55 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 14000 | | 11 | 5.7 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 140 | | 0.55 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 6.8 | | 0.55 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 24 | | 0.28 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 29 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.29 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.45 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.38 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.021 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.025 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.084 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.025 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 4.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.0068 | J | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.0088 | J | 0.040 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.014 | J | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.0095 | J | 0.040 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 8.8 | | 0.57 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 90 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.53 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.7 | | 0.28 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 13 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-2 (0-3') (Continued)

Lab Sample ID: 500-136756-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Lead | 18 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 430 | | 0.57 | 0.082 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 13 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 27 | | 0.28 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 47 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.52 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.24 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.036 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.049 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.041 | | 0.018 | 0.0061 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 5.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.0085 | J | 0.042 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.012 | J | 0.042 | 0.0057 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.019 | J | 0.042 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.016 | J | 0.042 | 0.0091 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.017 | J | 0.042 | 0.014 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.014 | J | 0.042 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.025 | J | 0.042 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.026 | J | 0.042 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.049 | | 0.042 | 0.0084 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.29 | J | 1.1 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.0 | | 0.53 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 110 | | 0.53 | 0.060 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.53 | | 0.21 | 0.049 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.066 | J | 0.11 | 0.019 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 12 | | 0.53 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 14 | | 0.26 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 9.5 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 11 | 5.5 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 33 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 910 | | 0.53 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 9.8 | | 0.53 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.45 | J | 0.53 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 25 | | 0.26 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 50 | | 1.1 | 0.46 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.30 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.45 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.023 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.040 | | 0.019 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.043 | | 0.017 | 0.0073 | mg/Kg | 1 | ☼ | 8260B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-10 (0-2.5') (Continued)

Lab Sample ID: 500-136756-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.025 | J | 0.040 | 0.0067 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.047 | | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.060 | | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.065 | | 0.040 | 0.0087 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.048 | | 0.040 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.013 | J | 0.040 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.046 | | 0.040 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.042 | | 0.040 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.063 | J | 0.20 | 0.047 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.060 | | 0.040 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.043 | | 0.040 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.13 | | 0.081 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.059 | | 0.040 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.19 | | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.066 | | 0.040 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 8.4 | | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 79 | | 0.61 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.61 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.19 | | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.0 | | 0.30 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 19 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 19000 | | 12 | 6.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 45 | | 0.30 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 480 | | 0.61 | 0.088 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.38 | J | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 28 | | 0.30 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 81 | | 1.2 | 0.53 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.38 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.25 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.096 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.047 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.026 | | 0.019 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.059 | | 0.017 | 0.0074 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.013 | J | 0.038 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.026 | J | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.045 | | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.047 | | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.038 | | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.024 | J | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.030 | J | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.034 | J | 0.038 | 0.0099 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.071 | J | 0.077 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.033 | J | 0.038 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-9 (0-2.5') (Continued)

Lab Sample ID: 500-136756-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Phenanthrene | 0.099 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.034 | J | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.26 | J | 1.0 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.4 | | 0.51 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 200 | | 0.51 | 0.058 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.58 | | 0.21 | 0.048 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.15 | | 0.10 | 0.018 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.51 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 11 | | 0.26 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 14 | | 0.51 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 10 | 5.3 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 45 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 540 | | 0.51 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.51 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.41 | J | 0.51 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 23 | | 0.26 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 60 | | 1.0 | 0.45 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.39 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.61 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.018 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.030 | | 0.019 | 0.0065 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.9 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.044 | | 0.017 | 0.0075 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo[a]anthracene | 0.0058 | J | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.0082 | J | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.0081 | J | 0.039 | 0.0078 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.2 | | 0.57 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 110 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.83 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 18 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 19 | | 0.28 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 11 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 22000 | | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 24 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 460 | | 0.57 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 16 | | 0.57 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 24 | | 0.28 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 47 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.72 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.74 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.055 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.020 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.024 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.013 | J | 0.020 | 0.0066 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 6.4 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.015 | J | 0.041 | 0.0069 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.032 | J | 0.041 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.053 | | 0.041 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.061 | | 0.041 | 0.0090 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.047 | | 0.041 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.014 | J | 0.041 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.031 | J | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenz(a,h)anthracene | 0.043 | | 0.041 | 0.0080 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.049 | | 0.041 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.044 | | 0.041 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.055 | J | 0.084 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.026 | J | 0.041 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.094 | | 0.041 | 0.0058 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.050 | | 0.041 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Arsenic | 7.0 | | 0.50 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 130 | | 0.50 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.57 | | 0.20 | 0.047 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.50 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 9.9 | | 0.25 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.50 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 17000 | | 10 | 5.2 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.25 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 540 | | 0.50 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.50 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.30 | J | 0.50 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 23 | | 0.25 | 0.059 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 45 | | 1.0 | 0.44 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.50 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.35 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.035 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.025 | | 0.020 | 0.0066 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.6 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.041 | | 0.020 | 0.0089 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Arsenic | 11 | | 0.54 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 74 | | 0.54 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.61 | | 0.21 | 0.050 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 20 | | 0.54 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.9 | | 0.27 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 16 | | 0.54 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 28000 | | 11 | 5.6 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 19 | | 0.27 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 250 | | 0.54 | 0.078 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.54 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 35 | | 0.27 | 0.063 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 55 | | 1.1 | 0.47 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.39 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-6 (0-2.5') (Continued)

Lab Sample ID: 500-136756-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Copper | 0.041 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.035 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.042 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.025 | | 0.018 | 0.0061 | mg/Kg | 1 | * | 7471B | Total/NA |
| pH | 5.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]anthracene | 0.0071 | J | 0.041 | 0.0055 | mg/Kg | 1 | * | 8270D | Total/NA |
| Fluoranthene | 0.0082 | J | 0.041 | 0.0076 | mg/Kg | 1 | * | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.016 | J | 0.082 | 0.0075 | mg/Kg | 1 | * | 8270D | Total/NA |
| Phenanthrene | 0.021 | J | 0.041 | 0.0057 | mg/Kg | 1 | * | 8270D | Total/NA |
| Pyrene | 0.0093 | J | 0.041 | 0.0081 | mg/Kg | 1 | * | 8270D | Total/NA |
| Arsenic | 9.5 | | 0.57 | 0.19 | mg/Kg | 1 | * | 6010B | Total/NA |
| Barium | 98 | | 0.57 | 0.065 | mg/Kg | 1 | * | 6010B | Total/NA |
| Beryllium | 0.73 | | 0.23 | 0.053 | mg/Kg | 1 | * | 6010B | Total/NA |
| Cadmium | 0.18 | | 0.11 | 0.020 | mg/Kg | 1 | * | 6010B | Total/NA |
| Chromium | 16 | | 0.57 | 0.28 | mg/Kg | 1 | * | 6010B | Total/NA |
| Cobalt | 7.9 | | 0.28 | 0.075 | mg/Kg | 1 | * | 6010B | Total/NA |
| Copper | 15 | | 0.57 | 0.16 | mg/Kg | 1 | * | 6010B | Total/NA |
| Iron | 20000 | | 11 | 5.9 | mg/Kg | 1 | * | 6010B | Total/NA |
| Lead | 60 | | 0.28 | 0.13 | mg/Kg | 1 | * | 6010B | Total/NA |
| Manganese | 440 | | 0.57 | 0.083 | mg/Kg | 1 | * | 6010B | Total/NA |
| Nickel | 15 | | 0.57 | 0.17 | mg/Kg | 1 | * | 6010B | Total/NA |
| Selenium | 0.40 | J | 0.57 | 0.33 | mg/Kg | 1 | * | 6010B | Total/NA |
| Vanadium | 27 | | 0.28 | 0.067 | mg/Kg | 1 | * | 6010B | Total/NA |
| Zinc | 66 | | 1.1 | 0.50 | mg/Kg | 1 | * | 6010B | Total/NA |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.019 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.87 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.027 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.046 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.034 | | 0.021 | 0.0070 | mg/Kg | 1 | * | 7471B | Total/NA |
| pH | 7.8 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.023 | | 0.020 | 0.0088 | mg/Kg | 1 | * | 8260B | Total/NA |
| Anthracene | 0.013 | J | 0.044 | 0.0074 | mg/Kg | 1 | * | 8270D | Total/NA |
| Benzo[a]anthracene | 0.037 | J | 0.044 | 0.0060 | mg/Kg | 1 | * | 8270D | Total/NA |
| Benzo[a]pyrene | 0.051 | | 0.044 | 0.0086 | mg/Kg | 1 | * | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.074 | | 0.044 | 0.0096 | mg/Kg | 1 | * | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.040 | J | 0.044 | 0.014 | mg/Kg | 1 | * | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.030 | J | 0.044 | 0.013 | mg/Kg | 1 | * | 8270D | Total/NA |
| Chrysene | 0.058 | | 0.044 | 0.012 | mg/Kg | 1 | * | 8270D | Total/NA |
| Fluoranthene | 0.082 | | 0.044 | 0.0082 | mg/Kg | 1 | * | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.025 | J | 0.044 | 0.011 | mg/Kg | 1 | * | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-4 (0-2.5') (Continued)

Lab Sample ID: 500-136756-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------------------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| 2-Methylnaphthalene | 0.044 | J | 0.089 | 0.0081 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.023 | J | 0.044 | 0.0068 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.083 | | 0.044 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.075 | | 0.044 | 0.0088 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.49 | J F1 | 1.3 | 0.25 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.6 | | 0.63 | 0.22 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 88 | | 0.63 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.47 | | 0.25 | 0.059 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.25 | B | 0.13 | 0.023 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 16 | | 0.63 | 0.31 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 6.0 | | 0.32 | 0.083 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 21 | | 0.63 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 18000 | | 13 | 6.6 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 30 | | 0.32 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 220 | F2 | 0.63 | 0.092 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.63 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 27 | | 0.32 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 97 | F1 | 1.3 | 0.56 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.49 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0026 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.29 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.084 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.056 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East |
| Mercury | 0.019 | J | 0.020 | 0.0067 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Benzo[a]pyrene | 0.015 | J | 0.037 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.014 | J | 0.037 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.35 | J | 1.0 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 8.7 | | 0.52 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 74 | | 0.52 | 0.059 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.60 | | 0.21 | 0.048 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 24 | | 0.52 | 0.26 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.0 | | 0.26 | 0.068 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 11 | | 0.52 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 22000 | | 10 | 5.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 13 | | 0.26 | 0.12 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 310 | | 0.52 | 0.075 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.52 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 26 | | 0.26 | 0.061 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 36 | | 1.0 | 0.46 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.47 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.24 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.029 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.037 | | 0.018 | 0.0058 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 7.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.036 | | 0.019 | 0.0083 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 0.036 | J | 0.038 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.063 | | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.050 | | 0.038 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.059 | | 0.038 | 0.0082 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.015 | J | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.016 | J | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.060 | | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.096 | J | 0.19 | 0.045 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.065 | | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.013 | J | 0.038 | 0.0099 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.18 | | 0.077 | 0.0070 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.081 | | 0.038 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.25 | | 0.038 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.075 | | 0.038 | 0.0076 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.32 | J | 1.1 | 0.22 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 9.6 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 220 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.72 | | 0.22 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.24 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 11 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 17 | | 0.28 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 15 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 55 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 3200 | | 2.8 | 0.41 | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Nickel | 15 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.71 | | 0.56 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Silver | 0.23 | J | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Thallium | 0.30 | J | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 25 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 66 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.50 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.23 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.085 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.058 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.033 | | 0.018 | 0.0059 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.2 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.025 | | 0.018 | 0.0078 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Phenanthrene | 0.017 | J | 0.039 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.24 | J | 1.1 | 0.22 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.6 | | 0.56 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 67 | | 0.56 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.49 | | 0.22 | 0.052 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.069 | J B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.56 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-1 (0-2.5') (Continued)

Lab Sample ID: 500-136756-24

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Cobalt | 7.7 | | 0.28 | 0.073 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 17000 | | 11 | 5.8 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 21 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 370 | | 0.56 | 0.081 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 12 | | 0.56 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 25 | | 0.28 | 0.066 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 53 | | 1.1 | 0.49 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.32 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.24 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.038 | | 0.021 | 0.0069 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-5-3 (0-1.2')

Lab Sample ID: 500-136756-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Arsenic | 5.1 | | 0.57 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 94 | | 0.57 | 0.065 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.48 | | 0.23 | 0.053 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.19 | B | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 10 | | 0.57 | 0.28 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 7.0 | | 0.28 | 0.074 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 13000 | | 11 | 5.9 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 73 | | 0.28 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 270 | | 0.57 | 0.082 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.57 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.38 | J | 0.57 | 0.33 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 17 | | 0.28 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 58 | | 1.1 | 0.50 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.97 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.089 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.031 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.028 | | 0.019 | 0.0064 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.0 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-5-2 (0-1.2')

Lab Sample ID: 500-136756-26

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------|--------|-----------|------|-------|-------|---------|---|--------|-----------|
| Arsenic | 4.7 | | 0.59 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 42 | | 0.59 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.43 | | 0.23 | 0.055 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.043 | J B | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 9.7 | | 0.59 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 5.7 | | 0.29 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 8.3 | | 0.59 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 20000 | | 12 | 6.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 43 | | 0.29 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-2 (0-1.2') (Continued)

Lab Sample ID: 500-136756-26

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil | Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|-----|-----|---|--------|-----------|
| Manganese | 110 | | 0.59 | 0.085 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Nickel | 8.3 | | 0.59 | 0.17 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Vanadium | 16 | | 0.29 | 0.069 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Zinc | 48 | | 1.2 | 0.51 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | 1 | | | 6010B | TCLP |
| Copper | 0.010 | J | 0.025 | 0.010 | mg/L | 1 | | | 6010B | TCLP |
| Iron | 0.31 | J | 0.40 | 0.20 | mg/L | 1 | | | 6010B | TCLP |
| Manganese | 0.038 | | 0.025 | 0.010 | mg/L | 1 | | | 6010B | TCLP |
| Zinc | 0.020 | J | 0.50 | 0.020 | mg/L | 1 | | | 6010B | TCLP |
| Mercury | 0.020 | | 0.019 | 0.0063 | mg/Kg | 1 | | ☼ | 7471B | Total/NA |
| pH | 6.1 | | 0.20 | 0.20 | SU | 1 | | | 9045D | Total/NA |

Client Sample ID: 3160-5-1 (0-1.2')

Lab Sample ID: 500-136756-27

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil | Fac | D | Method | Prep Type |
|-----------|--------|-----------|-------|--------|-------|-----|-----|---|--------|-----------|
| Antimony | 0.27 | J | 1.0 | 0.20 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Arsenic | 13 | | 0.52 | 0.18 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Barium | 83 | | 0.52 | 0.059 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Beryllium | 0.60 | | 0.21 | 0.048 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Cadmium | 0.22 | B | 0.10 | 0.019 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Chromium | 13 | | 0.52 | 0.26 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Cobalt | 8.6 | | 0.26 | 0.068 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Copper | 12 | | 0.52 | 0.14 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Iron | 16000 | | 10 | 5.4 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Lead | 110 | | 0.26 | 0.12 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Manganese | 310 | | 0.52 | 0.075 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Nickel | 17 | | 0.52 | 0.15 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Vanadium | 20 | | 0.26 | 0.061 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Zinc | 75 | | 1.0 | 0.45 | mg/Kg | 1 | | ☼ | 6010B | Total/NA |
| Barium | 1.2 | | 0.50 | 0.050 | mg/L | 1 | | | 6010B | TCLP |
| Copper | 0.017 | J | 0.025 | 0.010 | mg/L | 1 | | | 6010B | TCLP |
| Manganese | 0.089 | | 0.025 | 0.010 | mg/L | 1 | | | 6010B | TCLP |
| Zinc | 0.040 | J | 0.50 | 0.020 | mg/L | 1 | | | 6010B | TCLP |
| Mercury | 0.037 | | 0.018 | 0.0059 | mg/Kg | 1 | | ☼ | 7471B | Total/NA |
| pH | 8.6 | | 0.20 | 0.20 | SU | 1 | | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|---------------------|--------|----------------|----------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Solid | 11/02/17 08:05 | 11/03/17 08:50 |
| 500-136756-2 | 3160-51-2 (0-1.5') | Solid | 11/02/17 08:15 | 11/03/17 08:50 |
| 500-136756-3 | 3160-51-1 (0-1.5') | Solid | 11/02/17 08:25 | 11/03/17 08:50 |
| 500-136756-4 | 3160-36-11 (0-3') | Solid | 11/02/17 08:35 | 11/03/17 08:50 |
| 500-136756-5 | 3160-36-10 (0-3') | Solid | 11/02/17 08:45 | 11/03/17 08:50 |
| 500-136756-6 | 3160-36-9 (0-3') | Solid | 11/02/17 08:55 | 11/03/17 08:50 |
| 500-136756-7 | 3160-36-8 (0-3') | Solid | 11/02/17 09:05 | 11/03/17 08:50 |
| 500-136756-8 | 3160-36-7 (0-3') | Solid | 11/02/17 09:20 | 11/03/17 08:50 |
| 500-136756-9 | 3160-36-6 (0-3') | Solid | 11/02/17 09:30 | 11/03/17 08:50 |
| 500-136756-10 | 3160-36-5 (0-3') | Solid | 11/02/17 09:40 | 11/03/17 08:50 |
| 500-136756-11 | 3160-36-4 (0-3') | Solid | 11/02/17 10:10 | 11/03/17 08:50 |
| 500-136756-12 | 3160-36-3 (0-3') | Solid | 11/02/17 10:20 | 11/03/17 08:50 |
| 500-136756-13 | 3160-36-2 (0-3') | Solid | 11/02/17 10:30 | 11/03/17 08:50 |
| 500-136756-14 | 3160-36-1 (0-3') | Solid | 11/02/17 10:40 | 11/03/17 08:50 |
| 500-136756-15 | 3160-21-10 (0-2.5') | Solid | 11/02/17 11:00 | 11/03/17 08:50 |
| 500-136756-16 | 3160-21-9 (0-2.5') | Solid | 11/02/17 11:10 | 11/03/17 08:50 |
| 500-136756-17 | 3160-21-8 (0-2.5') | Solid | 11/02/17 12:15 | 11/03/17 08:50 |
| 500-136756-18 | 3160-21-7 (0-2.5') | Solid | 11/02/17 12:25 | 11/03/17 08:50 |
| 500-136756-19 | 3160-21-6 (0-2.5') | Solid | 11/02/17 12:35 | 11/03/17 08:50 |
| 500-136756-20 | 3160-21-5 (0-2.5') | Solid | 11/02/17 12:45 | 11/03/17 08:50 |
| 500-136756-21 | 3160-21-4 (0-2.5') | Solid | 11/02/17 12:55 | 11/03/17 08:50 |
| 500-136756-22 | 3160-21-3 (0-2.5') | Solid | 11/02/17 13:15 | 11/03/17 08:50 |
| 500-136756-23 | 3160-21-2 (0-2.5') | Solid | 11/02/17 13:25 | 11/03/17 08:50 |
| 500-136756-24 | 3160-21-1 (0-2.5') | Solid | 11/02/17 13:40 | 11/03/17 08:50 |
| 500-136756-25 | 3160-5-3 (0-1.2') | Solid | 11/02/17 14:00 | 11/03/17 08:50 |
| 500-136756-26 | 3160-5-2 (0-1.2') | Solid | 11/02/17 14:15 | 11/03/17 08:50 |
| 500-136756-27 | 3160-5-1 (0-1.2') | Solid | 11/02/17 14:30 | 11/03/17 08:50 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

Date Collected: 11/02/17 08:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00095 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 12:26 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Dibromofluoromethane | 105 | | 75 - 126 | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 114 | | 70 - 134 | 11/03/17 18:20 | 11/08/17 12:26 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/08/17 12:26 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Anthracene | <0.038 | | 0.038 | 0.0063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Benzo[a]anthracene | 0.016 | J | 0.038 | 0.0051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

Date Collected: 11/02/17 08:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.043 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Benzo[b]fluoranthene | 0.049 | | 0.038 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Benzo[g,h,i]perylene | 0.043 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | F1 | 0.19 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Chrysene | 0.019 | J | 0.038 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Dibenz(a,h)anthracene | 0.039 | | 0.038 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Fluoranthene | 0.024 | J | 0.038 | 0.0070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Hexachlorocyclopentadiene | <0.77 | F1 | 0.77 | 0.22 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.038 | | 0.038 | 0.0098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Methylnaphthalene | 0.022 | J | 0.077 | 0.0070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Naphthalene | 0.0097 | J | 0.038 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

Date Collected: 11/02/17 08:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|----------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Phenanthrene | 0.038 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Pyrene | 0.029 J | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 84 | | 44 - 121 | | | | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2-Fluorophenol | 96 | | 46 - 133 | | | | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Nitrobenzene-d5 | 86 | | 41 - 120 | | | | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Phenol-d5 | 97 | | 46 - 125 | | | | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| Terphenyl-d14 | 98 | | 35 - 160 | | | | 11/10/17 07:22 | 11/10/17 20:42 | 1 |
| 2,4,6-Tribromophenol | 67 | | 25 - 139 | | | | 11/10/17 07:22 | 11/10/17 20:42 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.43 | J F1 | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Arsenic | 6.8 | F1 | 0.56 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Barium | 89 | F1 | 0.56 | 0.064 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Beryllium | 0.49 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Cadmium | 0.24 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Chromium | 15 | F1 | 0.56 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Cobalt | 5.2 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Copper | 14 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Iron | 16000 | | 11 | 5.8 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Lead | 99 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Manganese | 200 | F2 | 0.56 | 0.081 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Nickel | 11 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Selenium | 0.49 | J F1 | 0.56 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Silver | <0.28 | F1 | 0.28 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Thallium | <0.56 | F1 | 0.56 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Vanadium | 22 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |
| Zinc | 66 | F1 | 1.1 | 0.49 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:15 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Barium | 0.70 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Iron | 0.33 J | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

Date Collected: 11/02/17 08:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Manganese | 0.031 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:40 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:32 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:32 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:19 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.016 | J | 0.018 | 0.0061 | mg/Kg | ✱ | 11/07/17 13:20 | 11/08/17 10:25 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.5 | | 0.20 | 0.20 | SU | | | 11/12/17 16:06 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.016 | | 0.016 | 0.0069 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Benzene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Bromodichloromethane | <0.0016 | | 0.0016 | 0.00032 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Bromoform | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Bromomethane | <0.0040 | | 0.0040 | 0.0015 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 2-Butanone (MEK) | <0.0040 | | 0.0040 | 0.0018 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Carbon disulfide | <0.0040 | | 0.0040 | 0.00083 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Carbon tetrachloride | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Chlorobenzene | <0.0016 | | 0.0016 | 0.00059 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Chloroethane | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Chloroform | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Chloromethane | <0.0040 | | 0.0040 | 0.0016 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| cis-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00045 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| cis-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Dibromochloromethane | <0.0016 | | 0.0016 | 0.00052 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,1-Dichloroethane | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,2-Dichloroethane | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,1-Dichloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,2-Dichloropropane | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,3-Dichloropropane, Total | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Ethylbenzene | <0.0016 | | 0.0016 | 0.00076 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 2-Hexanone | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Methylene Chloride | <0.0040 | | 0.0040 | 0.0016 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Methyl tert-butyl ether | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Styrene | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0016 | | 0.0016 | 0.00051 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Tetrachloroethene | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Toluene | <0.0016 | | 0.0016 | 0.00040 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| trans-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00071 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| trans-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,1,1-Trichloroethane | <0.0016 | | 0.0016 | 0.00053 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,1,2-Trichloroethane | <0.0016 | | 0.0016 | 0.00068 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Trichloroethene | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Vinyl acetate | <0.0040 | | 0.0040 | 0.0014 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Vinyl chloride | <0.0016 | | 0.0016 | 0.00070 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Xylenes, Total | <0.0032 | | 0.0032 | 0.00051 | mg/Kg | * | 11/03/17 18:20 | 11/08/17 12:51 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Dibromofluoromethane | 106 | | 75 - 126 | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/03/17 18:20 | 11/08/17 12:51 | 1 |
| Toluene-d8 (Surr) | 94 | | 75 - 124 | 11/03/17 18:20 | 11/08/17 12:51 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0070 | mg/Kg | * | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0051 | mg/Kg | * | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Anthracene | 0.031 | J | 0.038 | 0.0065 | mg/Kg | * | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Benzo[a]anthracene | 0.098 | | 0.038 | 0.0052 | mg/Kg | * | 11/10/17 07:22 | 11/10/17 22:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.13 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Benzo[b]fluoranthene | 0.15 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Benzo[g,h,i]perylene | 0.10 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Benzo[k]fluoranthene | 0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Chrysene | 0.12 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Dibenz(a,h)anthracene | 0.050 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Dibenzofuran | 0.073 | J | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Fluoranthene | 0.14 | | 0.038 | 0.0072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Fluorene | 0.0059 | J | 0.038 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.079 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Methylnaphthalene | 0.14 | | 0.078 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Naphthalene | 0.063 | | 0.038 | 0.0060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Phenanthrene | 0.25 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Phenol | <0.19 | | 0.19 | 0.086 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Pyrene | 0.20 | | 0.038 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 95 | | 44 - 121 | | | | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2-Fluorophenol | 102 | | 46 - 133 | | | | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Nitrobenzene-d5 | 90 | | 41 - 120 | | | | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Phenol-d5 | 107 | | 46 - 125 | | | | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| Terphenyl-d14 | 99 | | 35 - 160 | | | | 11/10/17 07:22 | 11/10/17 22:32 | 1 |
| 2,4,6-Tribromophenol | 79 | | 25 - 139 | | | | 11/10/17 07:22 | 11/10/17 22:32 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Arsenic | 6.4 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Barium | 82 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Beryllium | 0.68 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Cadmium | 0.45 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Chromium | 21 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Cobalt | 8.6 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Copper | 15 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Iron | 17000 | | 11 | 5.8 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Lead | 290 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Manganese | 360 | | 0.56 | 0.081 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Nickel | 14 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Selenium | 0.63 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Thallium | <0.56 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Vanadium | 20 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |
| Zinc | 110 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:43 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Barium | 0.85 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Iron | 0.20 J | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Manganese | 0.022 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |
| Zinc | 0.049 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:44 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:36 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:36 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 10:02 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.023 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:27 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.9 | | 0.20 | 0.20 | SU | | | 11/12/17 16:39 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

Date Collected: 11/02/17 08:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00086 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:16 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Dibromofluoromethane | 106 | | 75 - 126 | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/03/17 18:20 | 11/08/17 13:16 | 1 |
| Toluene-d8 (Surr) | 94 | | 75 - 124 | 11/03/17 18:20 | 11/08/17 13:16 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Anthracene | 0.025 | J | 0.041 | 0.0069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Benzo[a]anthracene | 0.049 | | 0.041 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

Date Collected: 11/02/17 08:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.066 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Benzo[b]fluoranthene | 0.073 | | 0.041 | 0.0089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Benzo[g,h,i]perylene | 0.054 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Benzo[k]fluoranthene | 0.015 | J | 0.041 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 4-Chloroaniline | <0.83 | | 0.83 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Chrysene | 0.053 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Dibenzofuran | 0.054 | J | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.83 | | 0.83 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4-Dinitrophenol | <0.83 | | 0.83 | 0.73 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Fluoranthene | 0.060 | | 0.041 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Hexachlorobenzene | <0.083 | | 0.083 | 0.0096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Hexachlorocyclopentadiene | <0.83 | | 0.83 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.046 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Methylnaphthalene | 0.099 | | 0.083 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Naphthalene | 0.044 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

Date Collected: 11/02/17 08:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.83 | | 0.83 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| N-Nitrosodi-n-propylamine | <0.083 | | 0.083 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Pentachlorophenol | <0.83 | | 0.83 | 0.66 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Phenanthrene | 0.17 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Phenol | <0.21 | | 0.21 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Pyrene | 0.068 | | 0.041 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 84 | | 44 - 121 | | | | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2-Fluorophenol | 97 | | 46 - 133 | | | | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Nitrobenzene-d5 | 81 | | 41 - 120 | | | | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Phenol-d5 | 94 | | 46 - 125 | | | | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| Terphenyl-d14 | 99 | | 35 - 160 | | | | 11/10/17 07:22 | 11/10/17 23:00 | 1 |
| 2,4,6-Tribromophenol | 71 | | 25 - 139 | | | | 11/10/17 07:22 | 11/10/17 23:00 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Arsenic | 7.3 | | 0.62 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Barium | 88 | | 0.62 | 0.071 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Beryllium | 0.52 | | 0.25 | 0.058 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Cadmium | 0.29 | | 0.12 | 0.022 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Chromium | 15 | | 0.62 | 0.31 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Cobalt | 7.7 | | 0.31 | 0.081 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Copper | 16 | | 0.62 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Iron | 16000 | | 12 | 6.5 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Lead | 69 | | 0.31 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Manganese | 340 | | 0.62 | 0.090 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Nickel | 13 | | 0.62 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Selenium | 0.59 | J | 0.62 | 0.37 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Silver | <0.31 | | 0.31 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Thallium | <0.62 | | 0.62 | 0.31 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Vanadium | 24 | | 0.31 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |
| Zinc | 78 | | 1.2 | 0.55 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:47 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Barium | 0.37 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Iron | 3.5 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

Date Collected: 11/02/17 08:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | 0.011 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Manganese | 0.040 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |
| Zinc | 0.061 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:49 | 1 |

Method: 6010B - SPLP Metals - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | 0.21 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 14:37 | 11/09/17 20:32 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:40 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:40 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 10:03 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.035 | | 0.019 | 0.0062 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:29 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.8 | | 0.20 | 0.20 | SU | | | 11/12/17 17:13 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

Date Collected: 11/02/17 08:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.017 | | 0.017 | 0.0075 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Bromomethane | <0.0043 | | 0.0043 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 2-Butanone (MEK) | <0.0043 | | 0.0043 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Carbon disulfide | <0.0043 | | 0.0043 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Chloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Chloromethane | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,2-Dichloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 2-Hexanone | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Methylene Chloride | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Vinyl acetate | <0.0043 | | 0.0043 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 13:42 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 96 | | 75 - 131 | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Dibromofluoromethane | 105 | | 75 - 126 | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/03/17 18:20 | 11/08/17 13:42 | 1 |
| Toluene-d8 (Surr) | 94 | | 75 - 124 | 11/03/17 18:20 | 11/08/17 13:42 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Anthracene | <0.041 | | 0.041 | 0.0069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Benzo[a]anthracene | <0.041 | | 0.041 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

Date Collected: 11/02/17 08:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.041 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Benzo[b]fluoranthene | <0.041 | | 0.041 | 0.0089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 4-Chloroaniline | <0.83 | | 0.83 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Chrysene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.83 | | 0.83 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4-Dinitrophenol | <0.83 | | 0.83 | 0.73 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Fluoranthene | <0.041 | | 0.041 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Hexachlorobenzene | <0.083 | | 0.083 | 0.0096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Hexachlorocyclopentadiene | <0.83 | | 0.83 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Methylnaphthalene | <0.083 | | 0.083 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Naphthalene | <0.041 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

Date Collected: 11/02/17 08:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.83 | | 0.83 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| N-Nitrosodi-n-propylamine | <0.083 | | 0.083 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Pentachlorophenol | <0.83 | | 0.83 | 0.66 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Phenanthrene | <0.041 | | 0.041 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Phenol | <0.21 | | 0.21 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Pyrene | <0.041 | | 0.041 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 85 | | 44 - 121 | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2-Fluorophenol | 100 | | 46 - 133 | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Nitrobenzene-d5 | 87 | | 41 - 120 | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Phenol-d5 | 97 | | 46 - 125 | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| Terphenyl-d14 | 99 | | 35 - 160 | 11/10/17 07:22 | 11/10/17 23:28 | 1 |
| 2,4,6-Tribromophenol | 60 | | 25 - 139 | 11/10/17 07:22 | 11/10/17 23:28 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Arsenic | 5.9 | | 0.59 | 0.20 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Barium | 35 | | 0.59 | 0.068 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Beryllium | 0.44 | | 0.24 | 0.056 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Cadmium | 0.023 J | | 0.12 | 0.021 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Chromium | 17 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Cobalt | 3.4 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Copper | 10 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Iron | 19000 | | 12 | 6.2 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Lead | 12 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Manganese | 84 | | 0.59 | 0.086 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Nickel | 7.3 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Selenium | 0.52 J | | 0.59 | 0.35 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Silver | <0.30 | | 0.30 | 0.077 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Thallium | <0.59 | | 0.59 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Vanadium | 29 | | 0.30 | 0.070 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |
| Zinc | 27 | | 1.2 | 0.52 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:51 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Barium | 0.21 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Copper | 0.011 J | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Iron | 0.20 J | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

Date Collected: 11/02/17 08:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Manganese | 0.054 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |
| Zinc | 0.030 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:53 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:44 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:44 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:31 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.016 | J | 0.019 | 0.0064 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:31 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.3 | | 0.20 | 0.20 | SU | | | 11/12/17 17:46 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

Date Collected: 11/02/17 08:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.018 | | 0.018 | 0.0078 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00094 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00086 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00077 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:07 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Dibromofluoromethane | 86 | | 75 - 126 | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 106 | | 70 - 134 | 11/03/17 18:20 | 11/08/17 14:07 | 1 |
| Toluene-d8 (Surr) | 94 | | 75 - 124 | 11/03/17 18:20 | 11/08/17 14:07 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[a]anthracene | 0.0059 | J | 0.039 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

Date Collected: 11/02/17 08:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.032 | J | 0.039 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0086 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[g,h,i]perylene | 0.032 | J | 0.039 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Methylnaphthalene | 0.010 | J | 0.080 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

Date Collected: 11/02/17 08:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Phenanthrene | 0.018 | J | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 91 | | 44 - 121 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Fluorophenol | 104 | | 46 - 133 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Nitrobenzene-d5 | 92 | | 41 - 120 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Phenol-d5 | 91 | | 46 - 125 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Terphenyl-d14 | 103 | | 35 - 160 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4,6-Tribromophenol | 57 | | 25 - 139 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Arsenic | 6.7 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Barium | 120 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Beryllium | 0.45 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Cadmium | 0.12 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Chromium | 17 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Cobalt | 5.5 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Copper | 17 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Iron | 19000 | | 11 | 5.8 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Lead | 27 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Manganese | 220 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Nickel | 12 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Selenium | 0.39 | J | 0.55 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Thallium | <0.55 | | 0.55 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Vanadium | 23 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |
| Zinc | 66 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:55 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Copper | 0.042 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Iron | 0.65 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

Date Collected: 11/02/17 08:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Manganese | 0.041 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |
| Zinc | 0.086 J | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:57 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:48 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:48 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:33 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.011 J | | 0.018 | 0.0058 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:34 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.6 | | 0.20 | 0.20 | SU | | | 11/12/17 18:20 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.016 | | 0.016 | 0.0071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Benzene | <0.0016 | | 0.0016 | 0.00042 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Bromodichloromethane | <0.0016 | | 0.0016 | 0.00033 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Bromoform | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Bromomethane | <0.0041 | | 0.0041 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 2-Butanone (MEK) | <0.0041 | | 0.0041 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Carbon disulfide | <0.0041 | | 0.0041 | 0.00085 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Carbon tetrachloride | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Chlorobenzene | <0.0016 | | 0.0016 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Chloroethane | <0.0041 | | 0.0041 | 0.0012 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Chloroform | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Chloromethane | <0.0041 | | 0.0041 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| cis-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| cis-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Dibromochloromethane | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,1-Dichloroethane | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,2-Dichloroethane | <0.0041 | | 0.0041 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,1-Dichloroethene | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,2-Dichloropropane | <0.0016 | | 0.0016 | 0.00042 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,3-Dichloropropene, Total | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Ethylbenzene | <0.0016 | | 0.0016 | 0.00078 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 2-Hexanone | <0.0041 | | 0.0041 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Methylene Chloride | <0.0041 | | 0.0041 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0041 | | 0.0041 | 0.0012 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Methyl tert-butyl ether | <0.0016 | | 0.0016 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Styrene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0016 | | 0.0016 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Tetrachloroethene | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Toluene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| trans-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| trans-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,1,1-Trichloroethane | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,1,2-Trichloroethane | <0.0016 | | 0.0016 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Trichloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Vinyl acetate | <0.0041 | | 0.0041 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Vinyl chloride | <0.0016 | | 0.0016 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Xylenes, Total | <0.0033 | | 0.0033 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:22 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Dibromofluoromethane | 107 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 108 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 11:22 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 11:22 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | 0.010 | J | 0.038 | 0.0069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Acenaphthylene | 0.0090 | J | 0.038 | 0.0051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Anthracene | 0.051 | | 0.038 | 0.0064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Benzo[a]anthracene | 0.15 | | 0.038 | 0.0052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.17 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Benzo[b]fluoranthene | 0.21 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Benzo[g,h,i]perylene | 0.11 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Benzo[k]fluoranthene | 0.069 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Chrysene | 0.18 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Dibenz(a,h)anthracene | 0.054 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Dibenzofuran | 0.15 J | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Fluoranthene | 0.24 | | 0.038 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.095 | | 0.038 | 0.0099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Methylnaphthalene | 0.26 | | 0.077 | 0.0070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Naphthalene | 0.11 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Phenanthrene | 0.44 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Pyrene | 0.22 | | 0.038 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 92 | | 44 - 121 | | | | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2-Fluorophenol | 98 | | 46 - 133 | | | | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Nitrobenzene-d5 | 91 | | 41 - 120 | | | | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Phenol-d5 | 98 | | 46 - 125 | | | | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| Terphenyl-d14 | 94 | | 35 - 160 | | | | 11/10/17 07:22 | 11/11/17 00:23 | 1 |
| 2,4,6-Tribromophenol | 78 | | 25 - 139 | | | | 11/10/17 07:22 | 11/11/17 00:23 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Arsenic | 10 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Barium | 91 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Beryllium | 0.63 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Cadmium | 0.82 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Chromium | 18 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Cobalt | 7.5 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Copper | 25 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Iron | 18000 | | 11 | 5.8 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Lead | 250 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Manganese | 410 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Nickel | 14 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Selenium | 1.0 | | 0.55 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Silver | <0.28 | | 0.28 | 0.071 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Thallium | <0.55 | | 0.55 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Vanadium | 21 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |
| Zinc | 180 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 19:59 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Barium | 0.47 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Cadmium | 0.0036 | J | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Copper | 0.040 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Iron | 0.30 | J | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:01 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | 0.019 | | 0.0075 | 0.0075 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Manganese | 0.038 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |
| Zinc | 1.4 | | 0.50 | 0.020 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:01 | 1 |

Method: 6010B - SPLP Metals - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | 0.40 | | 0.0075 | 0.0075 | mg/L | - | 11/08/17 14:37 | 11/09/17 20:36 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/08/17 08:50 | 11/10/17 10:52 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/08/17 08:50 | 11/10/17 10:52 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/08/17 13:40 | 11/09/17 09:37 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.039 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:36 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.7 | | 0.20 | 0.20 | SU | - | | 11/12/17 18:53 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

Date Collected: 11/02/17 09:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.016 | | 0.016 | 0.0070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Benzene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Bromodichloromethane | <0.0016 | | 0.0016 | 0.00033 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Bromoform | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Bromomethane | <0.0040 | | 0.0040 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 2-Butanone (MEK) | <0.0040 | | 0.0040 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Carbon disulfide | <0.0040 | | 0.0040 | 0.00084 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Carbon tetrachloride | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Chlorobenzene | <0.0016 | | 0.0016 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Chloroethane | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Chloroform | <0.0016 | | 0.0016 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Chloromethane | <0.0040 | | 0.0040 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| cis-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00045 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| cis-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Dibromochloromethane | <0.0016 | | 0.0016 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,1-Dichloroethane | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,2-Dichloroethane | <0.0040 | | 0.0040 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,1-Dichloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,2-Dichloropropane | <0.0016 | | 0.0016 | 0.00042 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,3-Dichloropropene, Total | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Ethylbenzene | <0.0016 | | 0.0016 | 0.00077 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 2-Hexanone | <0.0040 | | 0.0040 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Methylene Chloride | <0.0040 | | 0.0040 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0040 | | 0.0040 | 0.0012 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Methyl tert-butyl ether | <0.0016 | | 0.0016 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Styrene | <0.0016 | | 0.0016 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0016 | | 0.0016 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Tetrachloroethene | <0.0016 | | 0.0016 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Toluene | <0.0016 | | 0.0016 | 0.00041 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| trans-1,2-Dichloroethene | <0.0016 | | 0.0016 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| trans-1,3-Dichloropropene | <0.0016 | | 0.0016 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,1,1-Trichloroethane | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,1,2-Trichloroethane | <0.0016 | | 0.0016 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Trichloroethene | <0.0016 | | 0.0016 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Vinyl acetate | <0.0040 | | 0.0040 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Vinyl chloride | <0.0016 | | 0.0016 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Xylenes, Total | <0.0032 | | 0.0032 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 11:47 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Dibromofluoromethane | 107 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 111 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 11:47 | 1 |
| Toluene-d8 (Surr) | 94 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 11:47 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Anthracene | 0.013 | J | 0.039 | 0.0065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Benzo[a]anthracene | 0.042 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

Date Collected: 11/02/17 09:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.064 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Benzo[b]fluoranthene | 0.076 | | 0.039 | 0.0084 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Benzo[g,h,i]perylene | 0.049 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Benzo[k]fluoranthene | 0.017 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Chrysene | 0.048 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Fluoranthene | 0.063 | | 0.039 | 0.0072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.046 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Methylnaphthalene | 0.058 | J | 0.078 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Naphthalene | 0.026 | J | 0.039 | 0.0060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

Date Collected: 11/02/17 09:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Phenanthrene | 0.097 | | 0.039 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Phenol | <0.20 | | 0.20 | 0.086 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Pyrene | 0.069 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 80 | | 44 - 121 | | | | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2-Fluorophenol | 92 | | 46 - 133 | | | | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Nitrobenzene-d5 | 81 | | 41 - 120 | | | | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Phenol-d5 | 90 | | 46 - 125 | | | | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| Terphenyl-d14 | 94 | | 35 - 160 | | | | 11/10/17 07:22 | 11/11/17 00:51 | 1 |
| 2,4,6-Tribromophenol | 61 | | 25 - 139 | | | | 11/10/17 07:22 | 11/11/17 00:51 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Arsenic | 8.1 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Barium | 300 | | 0.56 | 0.063 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Beryllium | 0.74 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Cadmium | 0.55 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Chromium | 11 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Cobalt | 27 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Copper | 12 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Iron | 19000 | | 11 | 5.8 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Lead | 47 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Manganese | 3700 | | 5.6 | 0.81 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:10 | 10 |
| Nickel | 21 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Selenium | 1.2 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Thallium | 1.1 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Vanadium | 19 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |
| Zinc | 60 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:03 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Barium | 0.61 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Copper | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Iron | 0.37 | J | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

Date Collected: 11/02/17 09:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Manganese | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |
| Zinc | 0.045 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:05 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:56 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:56 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:39 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.037 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:43 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.9 | | 0.20 | 0.20 | SU | | | 11/12/17 19:27 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.036 | | 0.020 | 0.0085 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00040 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Bromomethane | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 2-Butanone (MEK) | <0.0049 | | 0.0049 | 0.0022 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Carbon disulfide | <0.0049 | | 0.0049 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Chloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Chloromethane | <0.0049 | | 0.0049 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,2-Dichloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00094 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 2-Hexanone | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Methylene Chloride | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00084 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Vinyl acetate | <0.0049 | | 0.0049 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Dibromofluoromethane | 104 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 12:13 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 12:13 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Anthracene | <0.041 | | 0.041 | 0.0068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Benzo[a]anthracene | <0.041 | | 0.041 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Benzo[b]fluoranthene | <0.041 | | 0.041 | 0.0088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 4-Chloroaniline | <0.83 | | 0.83 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Chrysene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.83 | | 0.83 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4-Dinitrophenol | <0.83 | | 0.83 | 0.72 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Fluoranthene | <0.041 | | 0.041 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Hexachlorobenzene | <0.083 | | 0.083 | 0.0095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Hexachlorocyclopentadiene | <0.83 | | 0.83 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Methylnaphthalene | <0.083 | | 0.083 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Naphthalene | <0.041 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.83 | | 0.83 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| N-Nitrosodi-n-propylamine | <0.083 | | 0.083 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Pentachlorophenol | <0.83 | | 0.83 | 0.66 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Phenanthrene | <0.041 | | 0.041 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Phenol | <0.21 | | 0.21 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Pyrene | <0.041 | | 0.041 | 0.0081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:30 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 78 | | 44 - 121 | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2-Fluorophenol | 88 | | 46 - 133 | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Nitrobenzene-d5 | 88 | | 41 - 120 | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Phenol-d5 | 86 | | 46 - 125 | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| Terphenyl-d14 | 90 | | 35 - 160 | 11/10/17 07:22 | 11/10/17 21:30 | 1 |
| 2,4,6-Tribromophenol | 80 | | 25 - 139 | 11/10/17 07:22 | 11/10/17 21:30 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Arsenic | 7.9 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Barium | 51 | | 0.61 | 0.069 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Beryllium | 0.53 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Cadmium | 0.024 J | | 0.12 | 0.022 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Chromium | 18 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Cobalt | 4.7 | | 0.30 | 0.079 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Copper | 14 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Iron | 20000 | | 12 | 6.3 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Lead | 14 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Manganese | 140 | | 0.61 | 0.088 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Nickel | 12 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Selenium | 0.63 | | 0.61 | 0.36 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Silver | <0.30 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Thallium | <0.61 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Vanadium | 31 | | 0.30 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |
| Zinc | 53 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:07 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Barium | 0.21 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Cobalt | 0.011 J | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Iron | 0.71 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Manganese | 0.23 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Nickel | 0.024 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |
| Zinc | 0.039 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:09 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.26 | | 0.025 | 0.010 | mg/L | | 11/08/17 14:37 | 11/09/17 20:40 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 11:00 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 11:00 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:40 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.011 | J | 0.020 | 0.0065 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:45 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.8 | | 0.20 | 0.20 | SU | | | 11/12/17 20:00 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

Date Collected: 11/02/17 09:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.022 | | 0.022 | 0.0094 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Benzene | <0.0022 | | 0.0022 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Bromodichloromethane | <0.0022 | | 0.0022 | 0.00044 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Bromoform | <0.0022 | | 0.0022 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Bromomethane | <0.0054 | | 0.0054 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 2-Butanone (MEK) | <0.0054 | | 0.0054 | 0.0024 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Carbon disulfide | <0.0054 | | 0.0054 | 0.0011 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Carbon tetrachloride | <0.0022 | | 0.0022 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Chlorobenzene | <0.0022 | | 0.0022 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Chloroethane | <0.0054 | | 0.0054 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Chloroform | <0.0022 | | 0.0022 | 0.00075 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Chloromethane | <0.0054 | | 0.0054 | 0.0022 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| cis-1,2-Dichloroethene | <0.0022 | | 0.0022 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| cis-1,3-Dichloropropene | <0.0022 | | 0.0022 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Dibromochloromethane | <0.0022 | | 0.0022 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,1-Dichloroethane | <0.0022 | | 0.0022 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,2-Dichloroethane | <0.0054 | | 0.0054 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,1-Dichloroethene | <0.0022 | | 0.0022 | 0.00075 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,2-Dichloropropane | <0.0022 | | 0.0022 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,3-Dichloropropane, Total | <0.0022 | | 0.0022 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Ethylbenzene | <0.0022 | | 0.0022 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 2-Hexanone | <0.0054 | | 0.0054 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Methylene Chloride | <0.0054 | | 0.0054 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0054 | | 0.0054 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Methyl tert-butyl ether | <0.0022 | | 0.0022 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Styrene | <0.0022 | | 0.0022 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0022 | | 0.0022 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Tetrachloroethene | <0.0022 | | 0.0022 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Toluene | <0.0022 | | 0.0022 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| trans-1,2-Dichloroethene | <0.0022 | | 0.0022 | 0.00096 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| trans-1,3-Dichloropropene | <0.0022 | | 0.0022 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,1,1-Trichloroethane | <0.0022 | | 0.0022 | 0.00073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,1,2-Trichloroethane | <0.0022 | | 0.0022 | 0.00093 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Trichloroethene | <0.0022 | | 0.0022 | 0.00073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Vinyl acetate | <0.0054 | | 0.0054 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Vinyl chloride | <0.0022 | | 0.0022 | 0.00096 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Xylenes, Total | <0.0043 | | 0.0043 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 12:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Dibromofluoromethane | 110 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 12:38 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 12:38 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Benzo[a]anthracene | <0.039 | | 0.039 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

Date Collected: 11/02/17 09:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0085 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Methylnaphthalene | <0.080 | | 0.080 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

Date Collected: 11/02/17 09:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.63 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Phenanthrene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 21:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 99 | | 44 - 121 | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2-Fluorophenol | 86 | | 46 - 133 | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Nitrobenzene-d5 | 76 | | 41 - 120 | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Phenol-d5 | 83 | | 46 - 125 | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| Terphenyl-d14 | 88 | | 35 - 160 | 11/10/17 07:22 | 11/10/17 21:54 | 1 |
| 2,4,6-Tribromophenol | 85 | | 25 - 139 | 11/10/17 07:22 | 11/10/17 21:54 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Arsenic | 8.5 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Barium | 52 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Beryllium | 0.52 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Chromium | 18 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Cobalt | 5.0 | | 0.27 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Copper | 14 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Iron | 22000 | | 11 | 5.7 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Lead | 13 | | 0.27 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Manganese | 120 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Nickel | 12 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Selenium | 0.93 | | 0.55 | 0.32 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Silver | <0.27 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Thallium | <0.55 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Vanadium | 31 | | 0.27 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |
| Zinc | 53 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:11 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Barium | 0.22 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Cobalt | 0.013 J | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Copper | 0.024 J | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Iron | 0.98 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:21 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

Date Collected: 11/02/17 09:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Manganese | 0.21 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Nickel | 0.028 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |
| Zinc | 0.080 | J | 0.50 | 0.020 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:21 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.078 | | 0.025 | 0.010 | mg/L | - | 11/08/17 14:37 | 11/09/17 20:44 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/08/17 08:50 | 11/09/17 15:17 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/08/17 08:50 | 11/09/17 15:17 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/08/17 13:40 | 11/09/17 09:42 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.043 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:54 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.3 | | 0.20 | 0.20 | SU | - | | 11/12/17 21:07 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

Date Collected: 11/02/17 09:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.021 | | 0.021 | 0.0089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Benzene | <0.0021 | | 0.0021 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Bromodichloromethane | <0.0021 | | 0.0021 | 0.00042 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Bromoform | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Bromomethane | <0.0051 | | 0.0051 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 2-Butanone (MEK) | <0.0051 | | 0.0051 | 0.0023 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Carbon disulfide | <0.0051 | | 0.0051 | 0.0011 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Carbon tetrachloride | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Chlorobenzene | <0.0021 | | 0.0021 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Chloroethane | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Chloroform | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Chloromethane | <0.0051 | | 0.0051 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| cis-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| cis-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Dibromochloromethane | <0.0021 | | 0.0021 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,1-Dichloroethane | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,2-Dichloroethane | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,1-Dichloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,2-Dichloropropane | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,3-Dichloropropene, Total | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Ethylbenzene | <0.0021 | | 0.0021 | 0.00098 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 2-Hexanone | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Methylene Chloride | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Methyl tert-butyl ether | <0.0021 | | 0.0021 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Styrene | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0021 | | 0.0021 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Tetrachloroethene | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Toluene | <0.0021 | | 0.0021 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| trans-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00091 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| trans-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,1,1-Trichloroethane | <0.0021 | | 0.0021 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,1,2-Trichloroethane | <0.0021 | | 0.0021 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Trichloroethene | <0.0021 | | 0.0021 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Vinyl acetate | <0.0051 | | 0.0051 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Vinyl chloride | <0.0021 | | 0.0021 | 0.00091 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Xylenes, Total | <0.0041 | | 0.0041 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:03 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 95 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Dibromofluoromethane | 108 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 109 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 13:03 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 13:03 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Benzo[a]anthracene | <0.040 | | 0.040 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

Date Collected: 11/02/17 09:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.71 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Methylnaphthalene | <0.082 | | 0.082 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

Date Collected: 11/02/17 09:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.65 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Phenanthrene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Phenol | <0.20 | | 0.20 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 22:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 83 | | 44 - 121 | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2-Fluorophenol | 91 | | 46 - 133 | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Phenol-d5 | 88 | | 46 - 125 | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| Terphenyl-d14 | 91 | | 35 - 160 | 11/10/17 07:22 | 11/10/17 22:18 | 1 |
| 2,4,6-Tribromophenol | 84 | | 25 - 139 | 11/10/17 07:22 | 11/10/17 22:18 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Arsenic | 7.2 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Barium | 120 | | 0.61 | 0.070 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Beryllium | 0.51 | | 0.25 | 0.057 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Cadmium | 0.074 | J | 0.12 | 0.022 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Chromium | 17 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Cobalt | 6.5 | | 0.31 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Copper | 15 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Iron | 19000 | | 12 | 6.4 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Lead | 13 | | 0.31 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Manganese | 150 | | 0.61 | 0.089 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Nickel | 16 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Selenium | 0.62 | | 0.61 | 0.36 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Silver | <0.31 | | 0.31 | 0.079 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Thallium | <0.61 | | 0.61 | 0.31 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Vanadium | 30 | | 0.31 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |
| Zinc | 76 | | 1.2 | 0.54 | mg/Kg | ☼ | 11/07/17 08:10 | 11/07/17 20:15 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Barium | 0.40 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Cadmium | 0.0025 | J | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Cobalt | 0.017 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Copper | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Iron | 0.68 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

Date Collected: 11/02/17 09:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Manganese | 0.28 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Nickel | 0.029 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |
| Zinc | 0.53 | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:25 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.073 | | 0.025 | 0.010 | mg/L | | 11/08/17 14:37 | 11/09/17 20:48 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:20 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:20 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:43 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.016 | J | 0.019 | 0.0062 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:56 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.6 | | 0.20 | 0.20 | SU | | | 11/12/17 21:40 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0086 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00040 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Bromomethane | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 2-Butanone (MEK) | <0.0049 | | 0.0049 | 0.0022 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Carbon disulfide | <0.0049 | | 0.0049 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Chloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Chloromethane | <0.0049 | | 0.0049 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,2-Dichloroethane | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00095 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 2-Hexanone | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Methylene Chloride | <0.0049 | | 0.0049 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0049 | | 0.0049 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00085 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Vinyl acetate | <0.0049 | | 0.0049 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 13:28 | 1 |
| Toluene-d8 (Surr) | 88 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 13:28 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.042 | | 0.042 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Acenaphthylene | <0.042 | | 0.042 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Anthracene | <0.042 | | 0.042 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Benzo[a]anthracene | <0.042 | | 0.042 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.042 | | 0.042 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Benzo[b]fluoranthene | <0.042 | | 0.042 | 0.0092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Benzo[g,h,i]perylene | <0.042 | | 0.042 | 0.014 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Benzo[k]fluoranthene | <0.042 | | 0.042 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.11 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 4-Chloroaniline | <0.86 | | 0.86 | 0.20 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 4-Chloro-3-methylphenol | <0.42 | | 0.42 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Chrysene | <0.042 | | 0.042 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Dibenz(a,h)anthracene | <0.042 | | 0.042 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4-Dichlorophenol | <0.42 | | 0.42 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4-Dimethylphenol | <0.42 | | 0.42 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.86 | | 0.86 | 0.34 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4-Dinitrophenol | <0.86 | | 0.86 | 0.75 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.084 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Fluoranthene | <0.042 | | 0.042 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Fluorene | <0.042 | | 0.042 | 0.0060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Hexachlorobenzene | <0.086 | | 0.086 | 0.0099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Hexachlorocyclopentadiene | <0.86 | | 0.86 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.042 | | 0.042 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Methylnaphthalene | <0.086 | | 0.086 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Naphthalene | <0.042 | | 0.042 | 0.0065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 3-Nitroaniline | <0.42 | | 0.42 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 4-Nitroaniline | <0.42 | | 0.42 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Nitrobenzene | <0.042 | | 0.042 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Nitrophenol | <0.42 | | 0.42 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.86 | | 0.86 | 0.40 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| N-Nitrosodi-n-propylamine | <0.086 | | 0.086 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Pentachlorophenol | <0.86 | | 0.86 | 0.68 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Phenanthrene | <0.042 | | 0.042 | 0.0059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Phenol | <0.21 | | 0.21 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Pyrene | <0.042 | | 0.042 | 0.0084 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4,5-Trichlorophenol | <0.42 | | 0.42 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4,6-Trichlorophenol | <0.42 | | 0.42 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 84 | | 44 - 121 | | | | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2-Fluorophenol | 106 | | 46 - 133 | | | | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Nitrobenzene-d5 | 80 | | 41 - 120 | | | | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | | | | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| Terphenyl-d14 | 96 | | 35 - 160 | | | | 11/10/17 07:22 | 11/10/17 23:32 | 1 |
| 2,4,6-Tribromophenol | 88 | | 25 - 139 | | | | 11/10/17 07:22 | 11/10/17 23:32 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.38 | J | 1.2 | 0.23 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Arsenic | 9.3 | | 0.60 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Barium | 100 | | 0.60 | 0.069 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Beryllium | 0.46 | | 0.24 | 0.056 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Cadmium | <0.12 | | 0.12 | 0.022 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Chromium | 16 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Cobalt | 8.1 | | 0.30 | 0.079 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Copper | 10 | | 0.60 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Iron | 19000 | | 12 | 6.3 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Lead | 23 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Manganese | 820 | | 0.60 | 0.088 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Nickel | 10 | | 0.60 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Selenium | 0.92 | | 0.60 | 0.36 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Silver | <0.30 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Thallium | <0.60 | | 0.60 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Vanadium | 33 | | 0.30 | 0.071 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |
| Zinc | 40 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:14 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Barium | 0.45 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Iron | 0.29 | J | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Manganese | 0.15 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Nickel | 0.022 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |
| Zinc | 0.034 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:29 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:24 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:24 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:44 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.034 | | 0.021 | 0.0070 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 10:59 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.6 | | 0.20 | 0.20 | SU | | | 11/12/17 22:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

Date Collected: 11/02/17 10:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.028 | | 0.018 | 0.0080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00095 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,3-Dichloropropene, Total | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00079 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 13:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Dibromofluoromethane | 94 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 13:54 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 13:54 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[a]anthracene | <0.039 | | 0.039 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

Date Collected: 11/02/17 10:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0085 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Chloroaniline | <0.79 | | 0.79 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.79 | | 0.79 | 0.31 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dinitrophenol | <0.79 | | 0.79 | 0.69 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachlorobenzene | <0.079 | | 0.079 | 0.0091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachlorocyclopentadiene | <0.79 | | 0.79 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Methylnaphthalene | <0.079 | | 0.079 | 0.0072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

Date Collected: 11/02/17 10:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.79 | | 0.79 | 0.37 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| N-Nitrosodi-n-propylamine | <0.079 | | 0.079 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Pentachlorophenol | <0.79 | | 0.79 | 0.63 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Phenanthrene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Phenol | <0.20 | | 0.20 | 0.087 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 81 | | 44 - 121 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2-Fluorophenol | 103 | | 46 - 133 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Nitrobenzene-d5 | 79 | | 41 - 120 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| Terphenyl-d14 | 94 | | 35 - 160 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |
| 2,4,6-Tribromophenol | 82 | | 25 - 139 | | | | 11/10/17 07:22 | 11/10/17 23:56 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Arsenic | 6.6 | | 0.55 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Barium | 49 | | 0.55 | 0.063 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Beryllium | 0.32 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Chromium | 12 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Cobalt | 3.2 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Copper | 7.4 | | 0.55 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Iron | 14000 | | 11 | 5.7 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Lead | 13 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Manganese | 140 | | 0.55 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Nickel | 6.8 | | 0.55 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Selenium | <0.55 | | 0.55 | 0.32 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Silver | <0.28 | | 0.28 | 0.071 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Thallium | <0.55 | | 0.55 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Vanadium | 24 | | 0.28 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |
| Zinc | 29 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:26 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Barium | 0.29 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Iron | 0.45 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

Date Collected: 11/02/17 10:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Manganese | 0.38 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Nickel | 0.021 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |
| Zinc | 0.025 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:33 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.084 | | 0.025 | 0.010 | mg/L | | 11/08/17 14:37 | 11/09/17 21:00 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:27 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:27 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:46 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.025 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:01 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 4.6 | | 0.20 | 0.20 | SU | | | 11/12/17 22:47 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

Date Collected: 11/02/17 10:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00097 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Dibromofluoromethane | 95 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 103 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 14:18 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 14:18 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Benzo[a]anthracene | 0.0068 | J | 0.040 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

Date Collected: 11/02/17 10:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0086 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Benzo[g,h,i]perylene | <0.040 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Fluoranthene | 0.0088 | J | 0.040 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2-Methylnaphthalene | <0.080 | | 0.080 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Naphthalene | <0.040 | | 0.040 | 0.0061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

Date Collected: 11/02/17 10:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Phenanthrene | 0.014 | J | 0.040 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Pyrene | 0.0095 | J | 0.040 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| <i>2-Fluorobiphenyl</i> | 79 | | 44 - 121 | | | | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| <i>2-Fluorophenol</i> | 74 | | 46 - 133 | | | | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| <i>Nitrobenzene-d5</i> | 96 | | 41 - 120 | | | | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| <i>Phenol-d5</i> | 89 | | 46 - 125 | | | | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| <i>Terphenyl-d14</i> | 89 | | 35 - 160 | | | | 11/10/17 07:22 | 11/11/17 00:20 | 1 |
| <i>2,4,6-Tribromophenol</i> | 84 | | 25 - 139 | | | | 11/10/17 07:22 | 11/11/17 00:20 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Arsenic | 8.8 | | 0.57 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Barium | 90 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Beryllium | 0.53 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Chromium | 16 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Cobalt | 8.7 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Copper | 13 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Iron | 20000 | | 11 | 5.9 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Lead | 18 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Manganese | 430 | | 0.57 | 0.082 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Nickel | 13 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Selenium | <0.57 | | 0.57 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Silver | <0.28 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Vanadium | 27 | | 0.28 | 0.067 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |
| Zinc | 47 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:30 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Barium | 0.52 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:37 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

Date Collected: 11/02/17 10:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Manganese | 0.24 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Nickel | 0.014 | J | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |
| Zinc | 0.036 | J | 0.50 | 0.020 | mg/L | - | 11/08/17 08:50 | 11/08/17 17:37 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.049 | | 0.025 | 0.010 | mg/L | - | 11/08/17 14:37 | 11/09/17 21:04 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/08/17 08:50 | 11/09/17 15:30 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/08/17 08:50 | 11/09/17 15:30 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/08/17 13:40 | 11/09/17 09:47 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.041 | | 0.018 | 0.0061 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:04 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.0 | | 0.20 | 0.20 | SU | - | | 11/12/17 23:20 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

Date Collected: 11/02/17 10:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 76.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.021 | | 0.021 | 0.0091 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Benzene | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Bromodichloromethane | <0.0021 | | 0.0021 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Bromoform | <0.0021 | | 0.0021 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Bromomethane | <0.0052 | | 0.0052 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 2-Butanone (MEK) | <0.0052 | | 0.0052 | 0.0023 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Carbon disulfide | <0.0052 | | 0.0052 | 0.0011 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Carbon tetrachloride | <0.0021 | | 0.0021 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Chlorobenzene | <0.0021 | | 0.0021 | 0.00077 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Chloroethane | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Chloroform | <0.0021 | | 0.0021 | 0.00073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Chloromethane | <0.0052 | | 0.0052 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| cis-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| cis-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Dibromochloromethane | <0.0021 | | 0.0021 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,1-Dichloroethane | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,2-Dichloroethane | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,1-Dichloroethene | <0.0021 | | 0.0021 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,2-Dichloropropane | <0.0021 | | 0.0021 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,3-Dichloropropane, Total | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Ethylbenzene | <0.0021 | | 0.0021 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 2-Hexanone | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Methylene Chloride | <0.0052 | | 0.0052 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0052 | | 0.0052 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Methyl tert-butyl ether | <0.0021 | | 0.0021 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Styrene | <0.0021 | | 0.0021 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0021 | | 0.0021 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Tetrachloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Toluene | <0.0021 | | 0.0021 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| trans-1,2-Dichloroethene | <0.0021 | | 0.0021 | 0.00093 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| trans-1,3-Dichloropropene | <0.0021 | | 0.0021 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,1,1-Trichloroethane | <0.0021 | | 0.0021 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,1,2-Trichloroethane | <0.0021 | | 0.0021 | 0.00090 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Trichloroethene | <0.0021 | | 0.0021 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Vinyl acetate | <0.0052 | | 0.0052 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Vinyl chloride | <0.0021 | | 0.0021 | 0.00093 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Xylenes, Total | <0.0042 | | 0.0042 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 14:43 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Dibromofluoromethane | 108 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 14:43 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 14:43 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.042 | | 0.042 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Acenaphthylene | <0.042 | | 0.042 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Anthracene | 0.0085 | J | 0.042 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Benzo[a]anthracene | 0.012 | J | 0.042 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

Date Collected: 11/02/17 10:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 76.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.019 | J | 0.042 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Benzo[b]fluoranthene | 0.016 | J | 0.042 | 0.0091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Benzo[g,h,i]perylene | 0.017 | J | 0.042 | 0.014 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Benzo[k]fluoranthene | <0.042 | | 0.042 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.11 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 4-Chloroaniline | <0.85 | | 0.85 | 0.20 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 4-Chloro-3-methylphenol | <0.42 | | 0.42 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Chrysene | 0.014 | J | 0.042 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Dibenz(a,h)anthracene | <0.042 | | 0.042 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4-Dichlorophenol | <0.42 | | 0.42 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4-Dimethylphenol | <0.42 | | 0.42 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.85 | | 0.85 | 0.34 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4-Dinitrophenol | <0.85 | | 0.85 | 0.75 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.083 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Fluoranthene | 0.025 | J | 0.042 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Fluorene | <0.042 | | 0.042 | 0.0060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Hexachlorobenzene | <0.085 | | 0.085 | 0.0098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Hexachlorocyclopentadiene | <0.85 | | 0.85 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.042 | | 0.042 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Methylnaphthalene | <0.085 | | 0.085 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Naphthalene | <0.042 | | 0.042 | 0.0065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 3-Nitroaniline | <0.42 | | 0.42 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 4-Nitroaniline | <0.42 | | 0.42 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Nitrobenzene | <0.042 | | 0.042 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Nitrophenol | <0.42 | | 0.42 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

Date Collected: 11/02/17 10:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 76.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.85 | | 0.85 | 0.40 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| N-Nitrosodi-n-propylamine | <0.085 | | 0.085 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Pentachlorophenol | <0.85 | | 0.85 | 0.68 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Phenanthrene | 0.026 | J | 0.042 | 0.0059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Phenol | <0.21 | | 0.21 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Pyrene | 0.049 | | 0.042 | 0.0084 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4,5-Trichlorophenol | <0.42 | | 0.42 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4,6-Trichlorophenol | <0.42 | | 0.42 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 00:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 79 | | 44 - 121 | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2-Fluorophenol | 75 | | 46 - 133 | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Nitrobenzene-d5 | 93 | | 41 - 120 | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Phenol-d5 | 90 | | 46 - 125 | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| Terphenyl-d14 | 90 | | 35 - 160 | 11/10/17 07:22 | 11/11/17 00:45 | 1 |
| 2,4,6-Tribromophenol | 72 | | 25 - 139 | 11/10/17 07:22 | 11/11/17 00:45 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.29 | J | 1.1 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Arsenic | 7.0 | | 0.53 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Barium | 110 | | 0.53 | 0.060 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Beryllium | 0.53 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Cadmium | 0.066 | J | 0.11 | 0.019 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Chromium | 12 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Cobalt | 14 | | 0.26 | 0.069 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Copper | 9.5 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Iron | 15000 | | 11 | 5.5 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Lead | 33 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Manganese | 910 | | 0.53 | 0.077 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Nickel | 9.8 | | 0.53 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Selenium | 0.45 | J | 0.53 | 0.31 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Silver | <0.26 | | 0.26 | 0.068 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Thallium | <0.53 | | 0.53 | 0.26 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Vanadium | 25 | | 0.26 | 0.062 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |
| Zinc | 50 | | 1.1 | 0.46 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:34 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Barium | 0.30 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Iron | 0.45 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

Date Collected: 11/02/17 10:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 76.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Manganese | 0.023 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:41 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:34 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:34 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:49 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.040 | | 0.019 | 0.0065 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:11 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.0 | | 0.20 | 0.20 | SU | | | 11/12/17 23:54 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.043 | | 0.017 | 0.0073 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00034 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Bromomethane | <0.0042 | | 0.0042 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 2-Butanone (MEK) | <0.0042 | | 0.0042 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Carbon disulfide | <0.0042 | | 0.0042 | 0.00087 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Chloroethane | <0.0042 | | 0.0042 | 0.0012 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Chloromethane | <0.0042 | | 0.0042 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,2-Dichloroethane | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 2-Hexanone | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Methylene Chloride | <0.0042 | | 0.0042 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0042 | | 0.0042 | 0.0012 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00042 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Vinyl acetate | <0.0042 | | 0.0042 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Xylenes, Total | <0.0033 | | 0.0033 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:08 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Dibromofluoromethane | 88 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 107 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 15:08 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 15:08 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Anthracene | 0.025 | J | 0.040 | 0.0067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Benzo[a]anthracene | 0.047 | | 0.040 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.060 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Benzo[b]fluoranthene | 0.065 | | 0.040 | 0.0087 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Benzo[g,h,i]perylene | 0.048 | | 0.040 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Benzo[k]fluoranthene | 0.013 | J | 0.040 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Chrysene | 0.046 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Dibenz(a,h)anthracene | 0.042 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Dibenzofuran | 0.063 | J | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4-Dinitrophenol | <0.81 | | 0.81 | 0.71 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Fluoranthene | 0.060 | | 0.040 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.043 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Methylnaphthalene | 0.13 | | 0.081 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Naphthalene | 0.059 | | 0.040 | 0.0062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.65 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Phenanthrene | 0.19 | | 0.040 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Pyrene | 0.066 | | 0.040 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 92 | | 44 - 121 | | | | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2-Fluorophenol | 104 | | 46 - 133 | | | | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Nitrobenzene-d5 | 94 | | 41 - 120 | | | | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Phenol-d5 | 100 | | 46 - 125 | | | | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| Terphenyl-d14 | 97 | | 35 - 160 | | | | 11/10/17 07:22 | 11/11/17 01:19 | 1 |
| 2,4,6-Tribromophenol | 65 | | 25 - 139 | | | | 11/10/17 07:22 | 11/11/17 01:19 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.24 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Arsenic | 8.4 | | 0.61 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Barium | 79 | | 0.61 | 0.069 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Beryllium | 0.61 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Cadmium | 0.19 | | 0.12 | 0.022 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Chromium | 16 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Cobalt | 9.0 | | 0.30 | 0.080 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Copper | 19 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Iron | 19000 | | 12 | 6.3 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Lead | 45 | | 0.30 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Manganese | 480 | | 0.61 | 0.088 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Nickel | 14 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Selenium | 0.38 J | | 0.61 | 0.36 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Silver | <0.30 | | 0.30 | 0.078 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Thallium | <0.61 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Vanadium | 28 | | 0.30 | 0.072 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |
| Zinc | 81 | | 1.2 | 0.53 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:38 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Barium | 0.38 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Iron | 0.25 J | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Manganese | 0.096 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |
| Zinc | 0.047 J | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:45 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:37 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:37 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:50 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.026 | | 0.019 | 0.0065 | mg/Kg | ✱ | 11/07/17 13:20 | 11/08/17 11:13 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.6 | | 0.20 | 0.20 | SU | | | 11/13/17 00:27 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

Date Collected: 11/02/17 11:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.059 | | 0.017 | 0.0074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00034 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Bromomethane | <0.0042 | | 0.0042 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 2-Butanone (MEK) | <0.0042 | | 0.0042 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Carbon disulfide | <0.0042 | | 0.0042 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Chloroethane | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Chloromethane | <0.0042 | | 0.0042 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,2-Dichloroethane | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 2-Hexanone | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Methylene Chloride | <0.0042 | | 0.0042 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0042 | | 0.0042 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Vinyl acetate | <0.0042 | | 0.0042 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00075 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/08/17 14:32 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Dibromofluoromethane | 97 | | 75 - 126 | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 108 | | 70 - 134 | 11/03/17 18:20 | 11/08/17 14:32 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/08/17 14:32 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Anthracene | 0.013 | J | 0.038 | 0.0064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Benzo[a]anthracene | 0.026 | J | 0.038 | 0.0051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

Date Collected: 11/02/17 11:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.045 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Benzo[b]fluoranthene | 0.047 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Benzo[g,h,i]perylene | 0.038 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Benzo[k]fluoranthene | <0.038 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Chrysene | 0.024 | J | 0.038 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Fluoranthene | 0.030 | J | 0.038 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.034 | J | 0.038 | 0.0099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Methylnaphthalene | 0.071 | J | 0.077 | 0.0070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Naphthalene | 0.033 | J | 0.038 | 0.0059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

Date Collected: 11/02/17 11:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|----------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Phenanthrene | 0.099 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Pyrene | 0.034 J | | 0.038 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:46 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 83 | | 44 - 121 | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2-Fluorophenol | 95 | | 46 - 133 | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Nitrobenzene-d5 | 85 | | 41 - 120 | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Phenol-d5 | 92 | | 46 - 125 | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| Terphenyl-d14 | 91 | | 35 - 160 | 11/10/17 07:22 | 11/11/17 01:46 | 1 |
| 2,4,6-Tribromophenol | 59 | | 25 - 139 | 11/10/17 07:22 | 11/11/17 01:46 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|---------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.26 J | | 1.0 | 0.20 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Arsenic | 7.4 | | 0.51 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Barium | 200 | | 0.51 | 0.058 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Beryllium | 0.58 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Cadmium | 0.15 | | 0.10 | 0.018 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Chromium | 14 | | 0.51 | 0.25 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Cobalt | 11 | | 0.26 | 0.067 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Copper | 14 | | 0.51 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Iron | 18000 | | 10 | 5.3 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Lead | 45 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Manganese | 540 | | 0.51 | 0.074 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Nickel | 12 | | 0.51 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Selenium | 0.41 J | | 0.51 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Silver | <0.26 | | 0.26 | 0.066 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Thallium | <0.51 | | 0.51 | 0.26 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Vanadium | 23 | | 0.26 | 0.061 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |
| Zinc | 60 | | 1.0 | 0.45 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:42 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Barium | 0.39 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Iron | 0.61 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

Date Collected: 11/02/17 11:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Manganese | 0.018 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:49 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:41 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:41 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:55 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.030 | | 0.019 | 0.0065 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:15 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.9 | | 0.20 | 0.20 | SU | | | 11/13/17 01:01 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

Date Collected: 11/02/17 12:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.044 | | 0.017 | 0.0075 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Bromomethane | <0.0043 | | 0.0043 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 2-Butanone (MEK) | <0.0043 | | 0.0043 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Carbon disulfide | <0.0043 | | 0.0043 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Chloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Chloromethane | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,2-Dichloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,3-Dichloropropane, Total | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 2-Hexanone | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Methylene Chloride | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00043 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Vinyl acetate | <0.0043 | | 0.0043 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Xylenes, Total | <0.0034 | | 0.0034 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 15:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Dibromofluoromethane | 106 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 103 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 15:59 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 15:59 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Benzo[a]anthracene | 0.0058 | J | 0.039 | 0.0053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

Date Collected: 11/02/17 12:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0085 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 4-Chloroaniline | <0.79 | | 0.79 | 0.18 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.79 | | 0.79 | 0.32 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4-Dinitrophenol | <0.79 | | 0.79 | 0.69 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Hexachlorobenzene | <0.079 | | 0.079 | 0.0091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Hexachlorocyclopentadiene | <0.79 | | 0.79 | 0.23 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Methylnaphthalene | <0.079 | | 0.079 | 0.0072 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0060 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

Date Collected: 11/02/17 12:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.79 | | 0.79 | 0.37 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| N-Nitrosodi-n-propylamine | <0.079 | | 0.079 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Pentachlorophenol | <0.79 | | 0.79 | 0.63 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Phenanthrene | 0.0082 | J | 0.039 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Phenol | <0.20 | | 0.20 | 0.087 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Pyrene | 0.0081 | J | 0.039 | 0.0078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 83 | | 44 - 121 | | | | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2-Fluorophenol | 93 | | 46 - 133 | | | | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Nitrobenzene-d5 | 82 | | 41 - 120 | | | | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Phenol-d5 | 92 | | 46 - 125 | | | | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| Terphenyl-d14 | 92 | | 35 - 160 | | | | 11/10/17 07:22 | 11/11/17 01:09 | 1 |
| 2,4,6-Tribromophenol | 77 | | 25 - 139 | | | | 11/10/17 07:22 | 11/11/17 01:09 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Arsenic | 7.2 | | 0.57 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Barium | 110 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Beryllium | 0.83 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.021 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Chromium | 18 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Cobalt | 19 | | 0.28 | 0.075 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Copper | 11 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Iron | 22000 | | 11 | 5.9 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Lead | 24 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Manganese | 460 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Nickel | 16 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Selenium | <0.57 | | 0.57 | 0.34 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Silver | <0.28 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Vanadium | 24 | | 0.28 | 0.067 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |
| Zinc | 47 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:46 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Barium | 0.72 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Iron | 0.74 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

Date Collected: 11/02/17 12:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Manganese | 0.055 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Nickel | 0.020 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |
| Zinc | 0.024 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:53 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:44 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:44 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:56 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.013 | J | 0.020 | 0.0066 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:18 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.4 | | 0.20 | 0.20 | SU | | | 11/13/17 01:34 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

Date Collected: 11/02/17 12:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00097 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:23 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Dibromofluoromethane | 104 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 16:23 | 1 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 16:23 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Anthracene | 0.015 | J | 0.041 | 0.0069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Benzo[a]anthracene | 0.032 | J | 0.041 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

Date Collected: 11/02/17 12:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.053 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Benzo[b]fluoranthene | 0.061 | | 0.041 | 0.0090 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Benzo[g,h,i]perylene | 0.047 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Benzo[k]fluoranthene | 0.014 | J | 0.041 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 4-Chloroaniline | <0.84 | | 0.84 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.071 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Chrysene | 0.031 | J | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Dibenz(a,h)anthracene | 0.043 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.099 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.84 | | 0.84 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4-Dinitrophenol | <0.84 | | 0.84 | 0.73 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Fluoranthene | 0.049 | | 0.041 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Hexachlorobenzene | <0.084 | | 0.084 | 0.0096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Hexachlorocyclopentadiene | <0.84 | | 0.84 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.044 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Methylnaphthalene | 0.055 | J | 0.084 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Naphthalene | 0.026 | J | 0.041 | 0.0064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

Date Collected: 11/02/17 12:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.84 | | 0.84 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| N-Nitrosodi-n-propylamine | <0.084 | | 0.084 | 0.051 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Pentachlorophenol | <0.84 | | 0.84 | 0.67 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Phenanthrene | 0.094 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Phenol | <0.21 | | 0.21 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Pyrene | 0.050 | | 0.041 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 02:14 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 89 | | 44 - 121 | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2-Fluorophenol | 100 | | 46 - 133 | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Nitrobenzene-d5 | 92 | | 41 - 120 | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Phenol-d5 | 98 | | 46 - 125 | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| Terphenyl-d14 | 92 | | 35 - 160 | 11/10/17 07:22 | 11/11/17 02:14 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | 11/10/17 07:22 | 11/11/17 02:14 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.0 | | 1.0 | 0.20 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Arsenic | 7.0 | | 0.50 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Barium | 130 | | 0.50 | 0.057 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Beryllium | 0.57 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Cadmium | <0.10 | | 0.10 | 0.018 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Chromium | 13 | | 0.50 | 0.25 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Cobalt | 9.9 | | 0.25 | 0.066 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Copper | 12 | | 0.50 | 0.14 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Iron | 17000 | | 10 | 5.2 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Lead | 21 | | 0.25 | 0.12 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Manganese | 540 | | 0.50 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Nickel | 12 | | 0.50 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Selenium | 0.30 | J | 0.50 | 0.30 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Silver | <0.25 | | 0.25 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Thallium | <0.50 | | 0.50 | 0.25 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Vanadium | 23 | | 0.25 | 0.059 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |
| Zinc | 45 | | 1.0 | 0.44 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:50 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Barium | 0.50 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Iron | 0.35 | J | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

Date Collected: 11/02/17 12:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Manganese | 0.035 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 17:57 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 15:48 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 15:48 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:58 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.025 | | 0.020 | 0.0066 | mg/Kg | ✱ | 11/07/17 13:20 | 11/08/17 11:20 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.6 | | 0.20 | 0.20 | SU | | | 11/13/17 02:08 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.041 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00042 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Bromomethane | <0.0051 | | 0.0051 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 2-Butanone (MEK) | <0.0051 | | 0.0051 | 0.0023 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Carbon disulfide | <0.0051 | | 0.0051 | 0.0011 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00076 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Chloroethane | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Chloromethane | <0.0051 | | 0.0051 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,2-Dichloroethane | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,3-Dichloropropane, Total | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00098 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 2-Hexanone | <0.0051 | | 0.0051 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Methylene Chloride | <0.0051 | | 0.0051 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0051 | | 0.0051 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00091 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00072 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Vinyl acetate | <0.0051 | | 0.0051 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00091 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Xylenes, Total | <0.0041 | | 0.0041 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 16:48 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 86 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Dibromofluoromethane | 106 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 101 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 16:48 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 16:48 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0074 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Anthracene | <0.041 | | 0.041 | 0.0069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Benzo[a]anthracene | <0.041 | | 0.041 | 0.0056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.041 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Benzo[b]fluoranthene | <0.041 | | 0.041 | 0.0089 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 4-Chloroaniline | <0.83 | | 0.83 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Chrysene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.83 | | 0.83 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4-Dinitrophenol | <0.83 | | 0.83 | 0.73 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Fluoranthene | <0.041 | | 0.041 | 0.0077 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Hexachlorobenzene | <0.083 | | 0.083 | 0.0096 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Hexachlorocyclopentadiene | <0.83 | | 0.83 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Methylnaphthalene | <0.083 | | 0.083 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Naphthalene | <0.041 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.056 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.098 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.83 | | 0.83 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| N-Nitrosodi-n-propylamine | <0.083 | | 0.083 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Pentachlorophenol | <0.83 | | 0.83 | 0.66 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Phenanthrene | <0.041 | | 0.041 | 0.0058 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Phenol | <0.21 | | 0.21 | 0.092 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Pyrene | <0.041 | | 0.041 | 0.0082 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.094 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:34 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 87 | | 44 - 121 | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2-Fluorophenol | 96 | | 46 - 133 | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Nitrobenzene-d5 | 85 | | 41 - 120 | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Phenol-d5 | 95 | | 46 - 125 | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| Terphenyl-d14 | 92 | | 35 - 160 | 11/10/17 07:22 | 11/11/17 01:34 | 1 |
| 2,4,6-Tribromophenol | 80 | | 25 - 139 | 11/10/17 07:22 | 11/11/17 01:34 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.21 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Arsenic | 11 | | 0.54 | 0.18 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Barium | 74 | | 0.54 | 0.061 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Beryllium | 0.61 | | 0.21 | 0.050 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Cadmium | <0.11 | | 0.11 | 0.019 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Chromium | 20 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Cobalt | 5.9 | | 0.27 | 0.070 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Copper | 16 | | 0.54 | 0.15 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Iron | 28000 | | 11 | 5.6 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Lead | 19 | | 0.27 | 0.12 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Manganese | 250 | | 0.54 | 0.078 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Nickel | 14 | | 0.54 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Selenium | <0.54 | | 0.54 | 0.32 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Silver | <0.27 | | 0.27 | 0.069 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Thallium | <0.54 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Vanadium | 35 | | 0.27 | 0.063 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |
| Zinc | 55 | | 1.1 | 0.47 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:54 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Barium | 0.39 J | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Copper | 0.041 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Manganese | 0.035 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Nickel | 0.012 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |
| Zinc | 0.042 | J | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 18:09 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 16:01 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 16:01 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:59 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.025 | | 0.018 | 0.0061 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:22 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.5 | | 0.20 | 0.20 | SU | | | 11/13/17 02:41 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

Date Collected: 11/02/17 12:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Bromomethane | <0.0047 | | 0.0047 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 2-Butanone (MEK) | <0.0047 | | 0.0047 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Carbon disulfide | <0.0047 | | 0.0047 | 0.00098 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00055 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Chloroethane | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Chloromethane | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,2-Dichloroethane | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00091 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 2-Hexanone | <0.0047 | | 0.0047 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Methylene Chloride | <0.0047 | | 0.0047 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0047 | | 0.0047 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Vinyl acetate | <0.0047 | | 0.0047 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00084 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Dibromofluoromethane | 82 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 89 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 17:13 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 17:13 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.041 | | 0.041 | 0.0073 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Acenaphthylene | <0.041 | | 0.041 | 0.0054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Anthracene | <0.041 | | 0.041 | 0.0068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Benzo[a]anthracene | 0.0071 | J | 0.041 | 0.0055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

Date Collected: 11/02/17 12:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Benzo[b]fluoranthene | <0.041 | | 0.041 | 0.0088 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Benzo[g,h,i]perylene | <0.041 | | 0.041 | 0.013 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Benzo[k]fluoranthene | <0.041 | | 0.041 | 0.012 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Bis(2-chloroethoxy)methane | <0.21 | | 0.21 | 0.042 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Bis(2-chloroethyl)ether | <0.21 | | 0.21 | 0.061 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.21 | | 0.21 | 0.075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 4-Bromophenyl phenyl ether | <0.21 | | 0.21 | 0.054 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Butyl benzyl phthalate | <0.21 | | 0.21 | 0.078 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Carbazole | <0.21 | | 0.21 | 0.10 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 4-Chloroaniline | <0.82 | | 0.82 | 0.19 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 4-Chloro-3-methylphenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2-Chloronaphthalene | <0.21 | | 0.21 | 0.045 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2-Chlorophenol | <0.21 | | 0.21 | 0.070 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 4-Chlorophenyl phenyl ether | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Chrysene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Dibenz(a,h)anthracene | <0.041 | | 0.041 | 0.0079 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Dibenzofuran | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 1,2-Dichlorobenzene | <0.21 | | 0.21 | 0.049 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 1,3-Dichlorobenzene | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 1,4-Dichlorobenzene | <0.21 | | 0.21 | 0.052 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 3,3'-Dichlorobenzidine | <0.21 | | 0.21 | 0.057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,4-Dichlorophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Diethyl phthalate | <0.21 | | 0.21 | 0.069 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,4-Dimethylphenol | <0.41 | | 0.41 | 0.16 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Dimethyl phthalate | <0.21 | | 0.21 | 0.053 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Di-n-butyl phthalate | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.82 | | 0.82 | 0.33 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,4-Dinitrophenol | <0.82 | | 0.82 | 0.72 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,4-Dinitrotoluene | <0.21 | | 0.21 | 0.065 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,6-Dinitrotoluene | <0.21 | | 0.21 | 0.080 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Di-n-octyl phthalate | <0.21 | | 0.21 | 0.067 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Fluoranthene | 0.0082 | J | 0.041 | 0.0076 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Fluorene | <0.041 | | 0.041 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Hexachlorobenzene | <0.082 | | 0.082 | 0.0095 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Hexachlorobutadiene | <0.21 | | 0.21 | 0.064 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Hexachlorocyclopentadiene | <0.82 | | 0.82 | 0.24 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Hexachloroethane | <0.21 | | 0.21 | 0.062 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.041 | | 0.041 | 0.011 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Isophorone | <0.21 | | 0.21 | 0.046 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2-Methylnaphthalene | 0.016 | J | 0.082 | 0.0075 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2-Methylphenol | <0.21 | | 0.21 | 0.066 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 3 & 4 Methylphenol | <0.21 | | 0.21 | 0.068 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Naphthalene | <0.041 | | 0.041 | 0.0063 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2-Nitroaniline | <0.21 | | 0.21 | 0.055 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 3-Nitroaniline | <0.41 | | 0.41 | 0.13 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 4-Nitroaniline | <0.41 | | 0.41 | 0.17 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Nitrobenzene | <0.041 | | 0.041 | 0.010 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2-Nitrophenol | <0.41 | | 0.41 | 0.097 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

Date Collected: 11/02/17 12:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.82 | | 0.82 | 0.39 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| N-Nitrosodi-n-propylamine | <0.082 | | 0.082 | 0.050 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| N-Nitrosodiphenylamine | <0.21 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.21 | | 0.21 | 0.047 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Pentachlorophenol | <0.82 | | 0.82 | 0.66 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Phenanthrene | 0.021 | J | 0.041 | 0.0057 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Phenol | <0.21 | | 0.21 | 0.091 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Pyrene | 0.0093 | J | 0.041 | 0.0081 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 1,2,4-Trichlorobenzene | <0.21 | | 0.21 | 0.044 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,4,5-Trichlorophenol | <0.41 | | 0.41 | 0.093 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| 2,4,6-Trichlorophenol | <0.41 | | 0.41 | 0.14 | mg/Kg | ☼ | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| <i>2-Fluorobiphenyl</i> | 59 | | 44 - 121 | | | | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| <i>2-Fluorophenol</i> | 63 | | 46 - 133 | | | | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| <i>Nitrobenzene-d5</i> | 58 | | 41 - 120 | | | | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| <i>Phenol-d5</i> | 64 | | 46 - 125 | | | | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| <i>Terphenyl-d14</i> | 66 | | 35 - 160 | | | | 11/10/17 07:22 | 11/11/17 01:58 | 1 |
| <i>2,4,6-Tribromophenol</i> | 46 | | 25 - 139 | | | | 11/10/17 07:22 | 11/11/17 01:58 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Arsenic | 9.5 | | 0.57 | 0.19 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Barium | 98 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Beryllium | 0.73 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Cadmium | 0.18 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Chromium | 16 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Cobalt | 7.9 | | 0.28 | 0.075 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Copper | 15 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Iron | 20000 | | 11 | 5.9 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Lead | 60 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Manganese | 440 | | 0.57 | 0.083 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Nickel | 15 | | 0.57 | 0.17 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Selenium | 0.40 | J | 0.57 | 0.33 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Silver | <0.28 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Vanadium | 27 | | 0.28 | 0.067 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |
| Zinc | 66 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/07/17 08:10 | 11/08/17 20:57 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Copper | 0.019 | J | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Iron | 0.87 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

Date Collected: 11/02/17 12:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Manganese | 0.027 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |
| Zinc | 0.046 J | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 18:13 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/09/17 16:05 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/09/17 16:05 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 10:01 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.034 | | 0.021 | 0.0070 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:24 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.8 | | 0.20 | 0.20 | SU | | | 11/13/17 03:14 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

Date Collected: 11/02/17 12:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 74.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.023 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00097 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 17:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 85 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Dibromofluoromethane | 105 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 104 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 17:38 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 17:38 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.044 | | 0.044 | 0.0080 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Acenaphthylene | <0.044 | | 0.044 | 0.0058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Anthracene | 0.013 | J | 0.044 | 0.0074 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Benzo[a]anthracene | 0.037 | J | 0.044 | 0.0060 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

Date Collected: 11/02/17 12:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 74.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.051 | | 0.044 | 0.0086 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Benzo[b]fluoranthene | 0.074 | | 0.044 | 0.0096 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Benzo[g,h,i]perylene | 0.040 | J | 0.044 | 0.014 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Benzo[k]fluoranthene | 0.030 | J | 0.044 | 0.013 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Bis(2-chloroethoxy)methane | <0.22 | | 0.22 | 0.045 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Bis(2-chloroethyl)ether | <0.22 | | 0.22 | 0.066 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.22 | | 0.22 | 0.081 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 4-Bromophenyl phenyl ether | <0.22 | | 0.22 | 0.058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Butyl benzyl phthalate | <0.22 | | 0.22 | 0.084 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Carbazole | <0.22 | | 0.22 | 0.11 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 4-Chloroaniline | <0.89 | | 0.89 | 0.21 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 4-Chloro-3-methylphenol | <0.44 | | 0.44 | 0.15 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Chloronaphthalene | <0.22 | | 0.22 | 0.049 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Chlorophenol | <0.22 | | 0.22 | 0.076 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 4-Chlorophenyl phenyl ether | <0.22 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Chrysene | 0.058 | | 0.044 | 0.012 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Dibenz(a,h)anthracene | <0.044 | | 0.044 | 0.0086 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Dibenzofuran | <0.22 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 1,2-Dichlorobenzene | <0.22 | | 0.22 | 0.053 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 1,3-Dichlorobenzene | <0.22 | | 0.22 | 0.050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 1,4-Dichlorobenzene | <0.22 | | 0.22 | 0.057 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 3,3'-Dichlorobenzidine | <0.22 | | 0.22 | 0.062 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4-Dichlorophenol | <0.44 | | 0.44 | 0.11 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Diethyl phthalate | <0.22 | | 0.22 | 0.075 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4-Dimethylphenol | <0.44 | | 0.44 | 0.17 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Dimethyl phthalate | <0.22 | | 0.22 | 0.058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Di-n-butyl phthalate | <0.22 | | 0.22 | 0.067 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.89 | | 0.89 | 0.36 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4-Dinitrophenol | <0.89 | | 0.89 | 0.78 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4-Dinitrotoluene | <0.22 | | 0.22 | 0.070 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,6-Dinitrotoluene | <0.22 | | 0.22 | 0.087 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Di-n-octyl phthalate | <0.22 | | 0.22 | 0.072 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Fluoranthene | 0.082 | | 0.044 | 0.0082 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Fluorene | <0.044 | | 0.044 | 0.0062 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Hexachlorobenzene | <0.089 | | 0.089 | 0.010 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Hexachlorobutadiene | <0.22 | | 0.22 | 0.070 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Hexachlorocyclopentadiene | <0.89 | | 0.89 | 0.25 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Hexachloroethane | <0.22 | | 0.22 | 0.067 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.025 | J | 0.044 | 0.011 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Isophorone | <0.22 | | 0.22 | 0.050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Methylnaphthalene | 0.044 | J | 0.089 | 0.0081 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Methylphenol | <0.22 | | 0.22 | 0.071 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 3 & 4 Methylphenol | <0.22 | | 0.22 | 0.074 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Naphthalene | 0.023 | J | 0.044 | 0.0068 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Nitroaniline | <0.22 | | 0.22 | 0.060 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 3-Nitroaniline | <0.44 | | 0.44 | 0.14 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 4-Nitroaniline | <0.44 | | 0.44 | 0.19 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Nitrobenzene | <0.044 | | 0.044 | 0.011 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Nitrophenol | <0.44 | | 0.44 | 0.10 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

Date Collected: 11/02/17 12:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 74.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|----------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.89 | | 0.89 | 0.42 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| N-Nitrosodi-n-propylamine | <0.089 | | 0.089 | 0.054 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| N-Nitrosodiphenylamine | <0.22 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.22 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Pentachlorophenol | <0.89 | | 0.89 | 0.71 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Phenanthrene | 0.083 | | 0.044 | 0.0062 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Phenol | <0.22 | | 0.22 | 0.098 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Pyrene | 0.075 | | 0.044 | 0.0088 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 1,2,4-Trichlorobenzene | <0.22 | | 0.22 | 0.048 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4,5-Trichlorophenol | <0.44 | | 0.44 | 0.10 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4,6-Trichlorophenol | <0.44 | | 0.44 | 0.15 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 73 | | 44 - 121 | | | | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2-Fluorophenol | 73 | | 46 - 133 | | | | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | | | | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Phenol-d5 | 70 | | 46 - 125 | | | | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| Terphenyl-d14 | 89 | | 35 - 160 | | | | 11/09/17 17:53 | 11/13/17 16:32 | 1 |
| 2,4,6-Tribromophenol | 71 | | 25 - 139 | | | | 11/09/17 17:53 | 11/13/17 16:32 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.49 | J F1 | 1.3 | 0.25 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Arsenic | 7.6 | | 0.63 | 0.22 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Barium | 88 | | 0.63 | 0.072 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Beryllium | 0.47 | | 0.25 | 0.059 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Cadmium | 0.25 | B | 0.13 | 0.023 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Chromium | 16 | | 0.63 | 0.31 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Cobalt | 6.0 | | 0.32 | 0.083 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Copper | 21 | | 0.63 | 0.18 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Iron | 18000 | | 13 | 6.6 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Lead | 30 | | 0.32 | 0.15 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Manganese | 220 | F2 | 0.63 | 0.092 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Nickel | 14 | | 0.63 | 0.18 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Selenium | <0.63 | F1 | 0.63 | 0.37 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Silver | <0.32 | | 0.32 | 0.082 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Thallium | <0.63 | | 0.63 | 0.32 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Vanadium | 27 | | 0.32 | 0.075 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |
| Zinc | 97 | F1 | 1.3 | 0.56 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 02:58 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Barium | 0.49 | J | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Cadmium | 0.0026 | J | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 18:38 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

Date Collected: 11/02/17 12:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 74.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Manganese | 0.29 | | 0.025 | 0.010 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |
| Zinc | 0.084 | J | 0.50 | 0.020 | mg/L | - | 11/08/17 09:26 | 11/08/17 18:38 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.056 | | 0.025 | 0.010 | mg/L | - | 11/10/17 14:43 | 11/11/17 18:28 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | - | 11/08/17 09:26 | 11/09/17 16:25 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | - | 11/08/17 09:26 | 11/09/17 16:25 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | - | 11/08/17 13:40 | 11/09/17 07:41 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.019 | J | 0.020 | 0.0067 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:31 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.0 | | 0.20 | 0.20 | SU | - | | 11/13/17 03:48 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

Date Collected: 11/02/17 13:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.019 | | 0.019 | 0.0081 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00038 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Bromomethane | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 2-Butanone (MEK) | <0.0046 | | 0.0046 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Carbon disulfide | <0.0046 | | 0.0046 | 0.00096 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Chloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Chloromethane | <0.0046 | | 0.0046 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,2-Dichloroethane | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00089 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 2-Hexanone | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Methylene Chloride | <0.0046 | | 0.0046 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0046 | | 0.0046 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Vinyl acetate | <0.0046 | | 0.0046 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Xylenes, Total | <0.0037 | | 0.0037 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:03 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Dibromofluoromethane | 108 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 110 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 18:03 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 18:03 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.037 | | 0.037 | 0.0068 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Acenaphthylene | <0.037 | | 0.037 | 0.0050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Anthracene | <0.037 | | 0.037 | 0.0063 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Benzo[a]anthracene | <0.037 | | 0.037 | 0.0051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

Date Collected: 11/02/17 13:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.015 | J | 0.037 | 0.0073 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Benzo[b]fluoranthene | <0.037 | | 0.037 | 0.0081 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Benzo[g,h,i]perylene | <0.037 | | 0.037 | 0.012 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Benzo[k]fluoranthene | <0.037 | | 0.037 | 0.011 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.038 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.069 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.094 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 4-Chloroaniline | <0.76 | | 0.76 | 0.18 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 4-Chloro-3-methylphenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Chrysene | <0.037 | | 0.037 | 0.010 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Dibenz(a,h)anthracene | <0.037 | | 0.037 | 0.0073 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Dibenzofuran | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.048 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4-Dichlorophenol | <0.37 | | 0.37 | 0.090 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4-Dimethylphenol | <0.37 | | 0.37 | 0.14 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.76 | | 0.76 | 0.30 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4-Dinitrophenol | <0.76 | | 0.76 | 0.66 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.074 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Fluoranthene | <0.037 | | 0.037 | 0.0070 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Fluorene | <0.037 | | 0.037 | 0.0053 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Hexachlorobenzene | <0.076 | | 0.076 | 0.0087 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Hexachlorocyclopentadiene | <0.76 | | 0.76 | 0.22 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.037 | | 0.037 | 0.0098 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Methylnaphthalene | <0.076 | | 0.076 | 0.0069 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Naphthalene | <0.037 | | 0.037 | 0.0058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 3-Nitroaniline | <0.37 | | 0.37 | 0.12 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 4-Nitroaniline | <0.37 | | 0.37 | 0.16 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Nitrobenzene | <0.037 | | 0.037 | 0.0094 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Nitrophenol | <0.37 | | 0.37 | 0.089 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

Date Collected: 11/02/17 13:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.76 | | 0.76 | 0.36 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| N-Nitrosodi-n-propylamine | <0.076 | | 0.076 | 0.046 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Pentachlorophenol | <0.76 | | 0.76 | 0.60 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Phenanthrene | 0.014 | J | 0.037 | 0.0053 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Phenol | <0.19 | | 0.19 | 0.084 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Pyrene | <0.037 | | 0.037 | 0.0075 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4,5-Trichlorophenol | <0.37 | | 0.37 | 0.086 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4,6-Trichlorophenol | <0.37 | | 0.37 | 0.13 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 16:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 74 | | 44 - 121 | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2-Fluorophenol | 73 | | 46 - 133 | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Nitrobenzene-d5 | 67 | | 41 - 120 | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Phenol-d5 | 85 | | 46 - 125 | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| Terphenyl-d14 | 91 | | 35 - 160 | 11/09/17 17:53 | 11/10/17 16:10 | 1 |
| 2,4,6-Tribromophenol | 89 | | 25 - 139 | 11/09/17 17:53 | 11/10/17 16:10 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.35 | J | 1.0 | 0.20 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Arsenic | 8.7 | | 0.52 | 0.18 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Barium | 74 | | 0.52 | 0.059 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Beryllium | 0.60 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Cadmium | <0.10 | | 0.10 | 0.019 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Chromium | 24 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Cobalt | 7.0 | | 0.26 | 0.068 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Copper | 11 | | 0.52 | 0.15 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Iron | 22000 | | 10 | 5.4 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Lead | 13 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Manganese | 310 | | 0.52 | 0.075 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Nickel | 11 | | 0.52 | 0.15 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Selenium | <0.52 | | 0.52 | 0.31 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Silver | <0.26 | | 0.26 | 0.067 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Thallium | <0.52 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Vanadium | 26 | | 0.26 | 0.061 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |
| Zinc | 36 | | 1.0 | 0.46 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:26 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Barium | 0.47 | J | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Iron | 0.24 | J | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

Date Collected: 11/02/17 13:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Manganese | 0.029 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:42 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:29 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:29 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:46 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.037 | | 0.018 | 0.0058 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:38 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 7.0 | | 0.20 | 0.20 | SU | | | 11/13/17 04:21 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.036 | | 0.019 | 0.0083 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.0010 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00048 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00064 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00082 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Xylenes, Total | <0.0038 | | 0.0038 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:29 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Dibromofluoromethane | 107 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 114 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 18:29 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 18:29 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0068 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Acenaphthylene | <0.038 | | 0.038 | 0.0050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Anthracene | 0.036 | J | 0.038 | 0.0064 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Benzo[a]anthracene | 0.063 | | 0.038 | 0.0051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.050 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Benzo[b]fluoranthene | 0.059 | | 0.038 | 0.0082 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Benzo[g,h,i]perylene | 0.015 | J | 0.038 | 0.012 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Benzo[k]fluoranthene | 0.016 | J | 0.038 | 0.011 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.057 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.072 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.095 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 4-Chloroaniline | <0.77 | | 0.77 | 0.18 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Chrysene | 0.060 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Dibenzofuran | 0.096 | J | 0.19 | 0.045 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.053 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.14 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 0.77 | 0.31 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4-Dinitrophenol | <0.77 | | 0.77 | 0.67 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.075 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Fluoranthene | 0.065 | | 0.038 | 0.0071 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Hexachlorobenzene | <0.077 | | 0.077 | 0.0088 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.060 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Hexachlorocyclopentadiene | <0.77 | | 0.77 | 0.22 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.013 | J | 0.038 | 0.0099 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Methylnaphthalene | 0.18 | | 0.077 | 0.0070 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Naphthalene | 0.081 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0095 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.090 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|------------------|------------------|---------------|--------|-------|---|-----------------|-----------------|----------------|
| 4-Nitrophenol | <0.77 | | 0.77 | 0.36 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| N-Nitrosodi-n-propylamine | <0.077 | | 0.077 | 0.047 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Pentachlorophenol | <0.77 | | 0.77 | 0.61 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Phenanthrene | 0.25 | | 0.038 | 0.0053 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Phenol | <0.19 | | 0.19 | 0.085 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Pyrene | 0.075 | | 0.038 | 0.0076 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.041 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.087 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl | 81 | | 44 - 121 | | | | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2-Fluorophenol | 73 | | 46 - 133 | | | | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Nitrobenzene-d5 | 76 | | 41 - 120 | | | | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Phenol-d5 | 83 | | 46 - 125 | | | | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| Terphenyl-d14 | 85 | | 35 - 160 | | | | 11/09/17 17:53 | 11/10/17 19:40 | 1 |
| 2,4,6-Tribromophenol | 62 | | 25 - 139 | | | | 11/09/17 17:53 | 11/10/17 19:40 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.32 | J | 1.1 | 0.22 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Arsenic | 9.6 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Barium | 220 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Beryllium | 0.72 | | 0.22 | 0.053 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Cadmium | 0.24 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Chromium | 11 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Cobalt | 17 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Copper | 15 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Iron | 16000 | | 11 | 5.8 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Lead | 55 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Manganese | 3200 | | 2.8 | 0.41 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 18:01 | 5 |
| Nickel | 15 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Selenium | 0.71 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Silver | 0.23 | J | 0.28 | 0.073 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Thallium | 0.30 | J | 0.56 | 0.28 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Vanadium | 25 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |
| Zinc | 66 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:30 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|-------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Barium | 0.50 | | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Iron | 0.23 | J | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Manganese | 0.085 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |
| Zinc | 0.058 J | | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:46 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:32 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:32 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:47 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.033 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:50 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.2 | | 0.20 | 0.20 | SU | | | 11/13/17 04:55 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

Date Collected: 11/02/17 13:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.025 | | 0.018 | 0.0078 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Benzene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Bromodichloromethane | <0.0018 | | 0.0018 | 0.00037 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Bromoform | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Bromomethane | <0.0045 | | 0.0045 | 0.0017 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 2-Butanone (MEK) | <0.0045 | | 0.0045 | 0.0020 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Carbon disulfide | <0.0045 | | 0.0045 | 0.00094 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Carbon tetrachloride | <0.0018 | | 0.0018 | 0.00052 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Chlorobenzene | <0.0018 | | 0.0018 | 0.00066 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Chloroethane | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Chloroform | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Chloromethane | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| cis-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00050 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| cis-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Dibromochloromethane | <0.0018 | | 0.0018 | 0.00059 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,1-Dichloroethane | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,2-Dichloroethane | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,1-Dichloroethene | <0.0018 | | 0.0018 | 0.00062 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,2-Dichloropropane | <0.0018 | | 0.0018 | 0.00047 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,3-Dichloropropane, Total | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Ethylbenzene | <0.0018 | | 0.0018 | 0.00086 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 2-Hexanone | <0.0045 | | 0.0045 | 0.0014 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Methylene Chloride | <0.0045 | | 0.0045 | 0.0018 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0045 | | 0.0045 | 0.0013 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Methyl tert-butyl ether | <0.0018 | | 0.0018 | 0.00053 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Styrene | <0.0018 | | 0.0018 | 0.00054 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0018 | | 0.0018 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Tetrachloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Toluene | <0.0018 | | 0.0018 | 0.00046 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| trans-1,2-Dichloroethene | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| trans-1,3-Dichloropropene | <0.0018 | | 0.0018 | 0.00063 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,1,1-Trichloroethane | <0.0018 | | 0.0018 | 0.00060 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,1,2-Trichloroethane | <0.0018 | | 0.0018 | 0.00077 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Trichloroethene | <0.0018 | | 0.0018 | 0.00061 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Vinyl acetate | <0.0045 | | 0.0045 | 0.0016 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Vinyl chloride | <0.0018 | | 0.0018 | 0.00080 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Xylenes, Total | <0.0036 | | 0.0036 | 0.00058 | mg/Kg | ☼ | 11/03/17 18:20 | 11/07/17 18:53 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Dibromofluoromethane | 95 | | 75 - 126 | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 104 | | 70 - 134 | 11/03/17 18:20 | 11/07/17 18:53 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/03/17 18:20 | 11/07/17 18:53 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0070 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Anthracene | <0.039 | | 0.039 | 0.0065 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Benzo[a]anthracene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

Date Collected: 11/02/17 13:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Benzo[b]fluoranthene | <0.039 | | 0.039 | 0.0084 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Benzo[g,h,i]perylene | <0.039 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.040 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.058 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.071 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.074 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.097 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 4-Chloroaniline | <0.79 | | 0.79 | 0.18 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Chrysene | <0.039 | | 0.039 | 0.011 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0075 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.050 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.055 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.093 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.79 | | 0.79 | 0.31 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4-Dinitrophenol | <0.79 | | 0.79 | 0.69 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.077 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Fluoranthene | <0.039 | | 0.039 | 0.0072 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Hexachlorobenzene | <0.079 | | 0.079 | 0.0090 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Hexachlorocyclopentadiene | <0.79 | | 0.79 | 0.22 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.059 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.039 | | 0.039 | 0.010 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Methylnaphthalene | <0.079 | | 0.079 | 0.0072 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Naphthalene | <0.039 | | 0.039 | 0.0060 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.16 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0097 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.092 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

Date Collected: 11/02/17 13:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.79 | | 0.79 | 0.37 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| N-Nitrosodi-n-propylamine | <0.079 | | 0.079 | 0.048 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Pentachlorophenol | <0.79 | | 0.79 | 0.63 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Phenanthrene | 0.017 | J | 0.039 | 0.0054 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Phenol | <0.20 | | 0.20 | 0.087 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Pyrene | <0.039 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.042 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.089 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.13 | mg/Kg | ☼ | 11/09/17 17:53 | 11/13/17 16:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 70 | | 44 - 121 | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2-Fluorophenol | 76 | | 46 - 133 | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Nitrobenzene-d5 | 64 | | 41 - 120 | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Phenol-d5 | 66 | | 46 - 125 | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| Terphenyl-d14 | 73 | | 35 - 160 | 11/09/17 17:53 | 11/13/17 16:59 | 1 |
| 2,4,6-Tribromophenol | 49 | | 25 - 139 | 11/09/17 17:53 | 11/13/17 16:59 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.24 | J | 1.1 | 0.22 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Arsenic | 7.6 | | 0.56 | 0.19 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Barium | 67 | | 0.56 | 0.064 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Beryllium | 0.49 | | 0.22 | 0.052 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Cadmium | 0.069 | J B | 0.11 | 0.020 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Chromium | 13 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Cobalt | 7.7 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Copper | 12 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Iron | 17000 | | 11 | 5.8 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Lead | 21 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Manganese | 370 | | 0.56 | 0.081 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Nickel | 12 | | 0.56 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Selenium | <0.56 | | 0.56 | 0.33 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Silver | <0.28 | | 0.28 | 0.072 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Thallium | <0.56 | | 0.56 | 0.28 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Vanadium | 25 | | 0.28 | 0.066 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |
| Zinc | 53 | | 1.1 | 0.49 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:34 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Barium | 0.32 | J | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Copper | 0.011 | J | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Iron | 0.24 | J | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

Date Collected: 11/02/17 13:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Manganese | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:58 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:43 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:43 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:49 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.038 | | 0.021 | 0.0069 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:53 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.3 | | 0.20 | 0.20 | SU | | | 11/13/17 05:28 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-3 (0-1.2')

Lab Sample ID: 500-136756-25

Date Collected: 11/02/17 14:00

Matrix: Solid

Date Received: 11/03/17 08:50

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Barium | 0.97 | | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Manganese | 0.089 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |
| Zinc | 0.031 | J | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:02 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:46 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:46 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:56 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.0 | | 0.20 | 0.20 | SU | | | 11/13/17 06:02 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-3 (0-1.2')

Lab Sample ID: 500-136756-25

Date Collected: 11/02/17 14:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.6

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.1 | | 1.1 | 0.22 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Arsenic | 5.1 | | 0.57 | 0.19 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Barium | 94 | | 0.57 | 0.065 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Beryllium | 0.48 | | 0.23 | 0.053 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Cadmium | 0.19 | B | 0.11 | 0.020 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Chromium | 10 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Cobalt | 7.0 | | 0.28 | 0.074 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Copper | 12 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Iron | 13000 | | 11 | 5.9 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Lead | 73 | | 0.28 | 0.13 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Manganese | 270 | | 0.57 | 0.082 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Nickel | 11 | | 0.57 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Selenium | 0.38 | J | 0.57 | 0.33 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Silver | <0.28 | | 0.28 | 0.073 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Thallium | <0.57 | | 0.57 | 0.28 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Vanadium | 17 | | 0.28 | 0.067 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |
| Zinc | 58 | | 1.1 | 0.50 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:38 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.028 | | 0.019 | 0.0064 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:55 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-2 (0-1.2')

Lab Sample ID: 500-136756-26

Date Collected: 11/02/17 14:15

Matrix: Solid

Date Received: 11/03/17 08:50

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Copper | 0.010 | J | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Iron | 0.31 | J | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Manganese | 0.038 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |
| Zinc | 0.020 | J | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:06 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:49 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:49 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:57 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 6.1 | | 0.20 | 0.20 | SU | | | 11/13/17 06:35 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-2 (0-1.2')

Lab Sample ID: 500-136756-26

Date Collected: 11/02/17 14:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | | 1.2 | 0.23 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Arsenic | 4.7 | | 0.59 | 0.20 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Barium | 42 | | 0.59 | 0.067 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Beryllium | 0.43 | | 0.23 | 0.055 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Cadmium | 0.043 | J B | 0.12 | 0.021 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Chromium | 9.7 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Cobalt | 5.7 | | 0.29 | 0.077 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Copper | 8.3 | | 0.59 | 0.16 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Iron | 20000 | | 12 | 6.1 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Lead | 43 | | 0.29 | 0.14 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Manganese | 110 | | 0.59 | 0.085 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Nickel | 8.3 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Selenium | <0.59 | | 0.59 | 0.34 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Silver | <0.29 | | 0.29 | 0.076 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Thallium | <0.59 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Vanadium | 16 | | 0.29 | 0.069 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |
| Zinc | 48 | | 1.2 | 0.51 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:42 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.020 | | 0.019 | 0.0063 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 11:57 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-1 (0-1.2')

Lab Sample ID: 500-136756-27

Date Collected: 11/02/17 14:30

Matrix: Solid

Date Received: 11/03/17 08:50

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Barium | 1.2 | | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Copper | 0.017 | J | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Manganese | 0.089 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |
| Zinc | 0.040 | J | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 19:10 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:53 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:53 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:59 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.6 | | 0.20 | 0.20 | SU | | | 11/13/17 07:08 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-1 (0-1.2')

Lab Sample ID: 500-136756-27

Date Collected: 11/02/17 14:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.8

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.27 | J | 1.0 | 0.20 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Arsenic | 13 | | 0.52 | 0.18 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Barium | 83 | | 0.52 | 0.059 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Beryllium | 0.60 | | 0.21 | 0.048 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Cadmium | 0.22 | B | 0.10 | 0.019 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Chromium | 13 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Cobalt | 8.6 | | 0.26 | 0.068 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Copper | 12 | | 0.52 | 0.14 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Iron | 16000 | | 10 | 5.4 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Lead | 110 | | 0.26 | 0.12 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Manganese | 310 | | 0.52 | 0.075 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Nickel | 17 | | 0.52 | 0.15 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Selenium | <0.52 | | 0.52 | 0.30 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Silver | <0.26 | | 0.26 | 0.067 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Thallium | <0.52 | | 0.52 | 0.26 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Vanadium | 20 | | 0.26 | 0.061 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |
| Zinc | 75 | | 1.0 | 0.45 | mg/Kg | ☼ | 11/08/17 07:33 | 11/09/17 03:46 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.037 | | 0.018 | 0.0059 | mg/Kg | ☼ | 11/07/17 13:20 | 11/08/17 12:00 | 1 |

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Qualifiers

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F1 | MS and/or MSD Recovery is outside acceptance limits. |

Metals

| Qualifier | Qualifier Description |
|-----------|--|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F2 | MS/MSD RPD exceeds control limits |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| B | Compound was found in the blank and sample. |
| F5 | Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. |
| F3 | Duplicate RPD exceeds the control limit |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

GC/MS VOA

Prep Batch: 408500

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 5035 | |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 5035 | |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 5035 | |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 5035 | |

Analysis Batch: 408744

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| MB 500-408744/6 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408744/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 500-408744/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

GC/MS VOA (Continued)

Analysis Batch: 408942

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 8260B | 408500 |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 8260B | 408500 |
| MB 500-408942/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408942/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCS 500-408942/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

GC/MS Semi VOA

Prep Batch: 409279

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 3541 | |
| MB 500-409279/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-409279/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Prep Batch: 409340

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 3541 | |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 3541 | |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 3541 | |
| MB 500-409340/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-409340/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| 500-136756-1 MS | 3160-51-3 (0-1.5') | Total/NA | Solid | 3541 | |
| 500-136756-1 MSD | 3160-51-3 (0-1.5') | Total/NA | Solid | 3541 | |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

GC/MS Semi VOA (Continued)

Analysis Batch: 409355

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 8270D | 409279 |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 8270D | 409279 |
| MB 500-409279/1-A | Method Blank | Total/NA | Solid | 8270D | 409279 |
| LCS 500-409279/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 409279 |

Analysis Batch: 409400

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 8270D | 409340 |
| MB 500-409340/1-A | Method Blank | Total/NA | Solid | 8270D | 409340 |
| LCS 500-409340/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 409340 |

Analysis Batch: 409487

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-1 MS | 3160-51-3 (0-1.5') | Total/NA | Solid | 8270D | 409340 |
| 500-136756-1 MSD | 3160-51-3 (0-1.5') | Total/NA | Solid | 8270D | 409340 |

Analysis Batch: 409657

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 8270D | 409279 |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 8270D | 409279 |

Metals

Prep Batch: 408751

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 3050B | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Prep Batch: 408751 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 3050B | |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 3050B | |
| MB 500-408751/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408751/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-136756-1 MS | 3160-51-3 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136756-1 MSD | 3160-51-3 (0-1.5') | Total/NA | Solid | 3050B | |
| 500-136756-1 DU | 3160-51-3 (0-1.5') | Total/NA | Solid | 3050B | |

Prep Batch: 408789

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 7471B | |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 7471B | |
| MB 500-408789/35-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-408789/36-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-136756-8 MS | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-8 MSD | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | |
| 500-136756-8 DU | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | |

Prep Batch: 408790

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 7471B | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Prep Batch: 408790 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-25 | 3160-5-3 (0-1.2') | Total/NA | Solid | 7471B | |
| 500-136756-26 | 3160-5-2 (0-1.2') | Total/NA | Solid | 7471B | |
| 500-136756-27 | 3160-5-1 (0-1.2') | Total/NA | Solid | 7471B | |
| MB 500-408790/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-408790/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-136756-22 MS | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-22 MSD | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | |
| 500-136756-22 DU | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | |

Leach Batch: 408821

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136756-2 | 3160-51-2 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136756-3 | 3160-51-1 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136756-4 | 3160-36-11 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-5 | 3160-36-10 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-6 | 3160-36-9 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-7 | 3160-36-8 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-8 | 3160-36-7 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-9 | 3160-36-6 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-10 | 3160-36-5 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-11 | 3160-36-4 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-12 | 3160-36-3 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-13 | 3160-36-2 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-14 | 3160-36-1 (0-3') | TCLP | Solid | 1311 | |
| 500-136756-15 | 3160-21-10 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-16 | 3160-21-9 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-17 | 3160-21-8 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-18 | 3160-21-7 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-19 | 3160-21-6 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-20 | 3160-21-5 (0-2.5') | TCLP | Solid | 1311 | |
| LB 500-408821/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 500-408821/1-C | Method Blank | TCLP | Solid | 1311 | |
| 500-136756-3 MS | 3160-51-1 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136756-20 MS | 3160-21-5 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-3 DU | 3160-51-1 (0-1.5') | TCLP | Solid | 1311 | |
| 500-136756-20 DU | 3160-21-5 (0-2.5') | TCLP | Solid | 1311 | |

Leach Batch: 408822

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-22 | 3160-21-3 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-23 | 3160-21-2 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-24 | 3160-21-1 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-25 | 3160-5-3 (0-1.2') | TCLP | Solid | 1311 | |
| 500-136756-26 | 3160-5-2 (0-1.2') | TCLP | Solid | 1311 | |
| 500-136756-27 | 3160-5-1 (0-1.2') | TCLP | Solid | 1311 | |
| LB 500-408822/1-B | Method Blank | TCLP | Solid | 1311 | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Leach Batch: 408822 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| LB 500-408822/1-C | Method Blank | TCLP | Solid | 1311 | |
| 500-136756-21 MS | 3160-21-4 (0-2.5') | TCLP | Solid | 1311 | |
| 500-136756-21 DU | 3160-21-4 (0-2.5') | TCLP | Solid | 1311 | |

Leach Batch: 408829

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-3 | 3160-51-1 (0-1.5') | SPLP East | Solid | 1312 | |
| 500-136756-6 | 3160-36-9 (0-3') | SPLP East | Solid | 1312 | |
| 500-136756-8 | 3160-36-7 (0-3') | SPLP East | Solid | 1312 | |
| 500-136756-9 | 3160-36-6 (0-3') | SPLP East | Solid | 1312 | |
| 500-136756-10 | 3160-36-5 (0-3') | SPLP East | Solid | 1312 | |
| 500-136756-12 | 3160-36-3 (0-3') | SPLP East | Solid | 1312 | |
| 500-136756-13 | 3160-36-2 (0-3') | SPLP East | Solid | 1312 | |
| LB 500-408829/1-B | Method Blank | SPLP East | Solid | 1312 | |

Leach Batch: 408832

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | SPLP East | Solid | 1312 | |
| LB 500-408832/1-C | Method Blank | SPLP East | Solid | 1312 | |

Prep Batch: 408945

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-25 | 3160-5-3 (0-1.2') | Total/NA | Solid | 3050B | |
| 500-136756-26 | 3160-5-2 (0-1.2') | Total/NA | Solid | 3050B | |
| 500-136756-27 | 3160-5-1 (0-1.2') | Total/NA | Solid | 3050B | |
| MB 500-408945/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408945/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-136756-21 MS | 3160-21-4 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-21 MSD | 3160-21-4 (0-2.5') | Total/NA | Solid | 3050B | |
| 500-136756-21 DU | 3160-21-4 (0-2.5') | Total/NA | Solid | 3050B | |

Analysis Batch: 408958

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 6010B | 408751 |
| MB 500-408751/1-A | Method Blank | Total/NA | Solid | 6010B | 408751 |
| LCS 500-408751/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408751 |
| 500-136756-1 MS | 3160-51-3 (0-1.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-1 MSD | 3160-51-3 (0-1.5') | Total/NA | Solid | 6010B | 408751 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Analysis Batch: 408958 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|--------------------|-----------|--------|--------|------------|
| 500-136756-1 DU | 3160-51-3 (0-1.5') | Total/NA | Solid | 6010B | 408751 |

Prep Batch: 408963

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-2 | 3160-51-2 (0-1.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-3 | 3160-51-1 (0-1.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-4 | 3160-36-11 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-5 | 3160-36-10 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-6 | 3160-36-9 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-7 | 3160-36-8 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-8 | 3160-36-7 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-9 | 3160-36-6 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-10 | 3160-36-5 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-11 | 3160-36-4 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-12 | 3160-36-3 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-13 | 3160-36-2 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-14 | 3160-36-1 (0-3') | TCLP | Solid | 3010A | 408821 |
| 500-136756-15 | 3160-21-10 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-16 | 3160-21-9 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-17 | 3160-21-8 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-18 | 3160-21-7 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-19 | 3160-21-6 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-20 | 3160-21-5 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| LB 500-408821/1-B | Method Blank | TCLP | Solid | 3010A | 408821 |
| LCS 500-408963/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| 500-136756-20 MS | 3160-21-5 (0-2.5') | TCLP | Solid | 3010A | 408821 |
| 500-136756-20 DU | 3160-21-5 (0-2.5') | TCLP | Solid | 3010A | 408821 |

Prep Batch: 408973

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | TCLP | Solid | 3010A | 408822 |
| 500-136756-22 | 3160-21-3 (0-2.5') | TCLP | Solid | 3010A | 408822 |
| 500-136756-23 | 3160-21-2 (0-2.5') | TCLP | Solid | 3010A | 408822 |
| 500-136756-24 | 3160-21-1 (0-2.5') | TCLP | Solid | 3010A | 408822 |
| 500-136756-25 | 3160-5-3 (0-1.2') | TCLP | Solid | 3010A | 408822 |
| 500-136756-26 | 3160-5-2 (0-1.2') | TCLP | Solid | 3010A | 408822 |
| 500-136756-27 | 3160-5-1 (0-1.2') | TCLP | Solid | 3010A | 408822 |
| LB 500-408822/1-B | Method Blank | TCLP | Solid | 3010A | 408822 |
| LCS 500-408973/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Prep Batch: 409004

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-2 | 3160-51-2 (0-1.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-3 | 3160-51-1 (0-1.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-4 | 3160-36-11 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-5 | 3160-36-10 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-6 | 3160-36-9 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-7 | 3160-36-8 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-8 | 3160-36-7 (0-3') | TCLP | Solid | 7470A | 408821 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Prep Batch: 409004 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-9 | 3160-36-6 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-10 | 3160-36-5 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-11 | 3160-36-4 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-12 | 3160-36-3 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-13 | 3160-36-2 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-14 | 3160-36-1 (0-3') | TCLP | Solid | 7470A | 408821 |
| 500-136756-15 | 3160-21-10 (0-2.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-16 | 3160-21-9 (0-2.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-17 | 3160-21-8 (0-2.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-18 | 3160-21-7 (0-2.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-19 | 3160-21-6 (0-2.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-20 | 3160-21-5 (0-2.5') | TCLP | Solid | 7470A | 408821 |
| LB 500-408821/1-C | Method Blank | TCLP | Solid | 7470A | 408821 |
| MB 500-409004/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-409004/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-136756-3 MS | 3160-51-1 (0-1.5') | TCLP | Solid | 7470A | 408821 |
| 500-136756-3 DU | 3160-51-1 (0-1.5') | TCLP | Solid | 7470A | 408821 |

Prep Batch: 409005

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | TCLP | Solid | 7470A | 408822 |
| 500-136756-22 | 3160-21-3 (0-2.5') | TCLP | Solid | 7470A | 408822 |
| 500-136756-23 | 3160-21-2 (0-2.5') | TCLP | Solid | 7470A | 408822 |
| 500-136756-24 | 3160-21-1 (0-2.5') | TCLP | Solid | 7470A | 408822 |
| 500-136756-25 | 3160-5-3 (0-1.2') | TCLP | Solid | 7470A | 408822 |
| 500-136756-26 | 3160-5-2 (0-1.2') | TCLP | Solid | 7470A | 408822 |
| 500-136756-27 | 3160-5-1 (0-1.2') | TCLP | Solid | 7470A | 408822 |
| LB 500-408822/1-C | Method Blank | TCLP | Solid | 7470A | 408822 |
| MB 500-409005/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-409005/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-136756-21 MS | 3160-21-4 (0-2.5') | TCLP | Solid | 7470A | 408822 |
| 500-136756-21 DU | 3160-21-4 (0-2.5') | TCLP | Solid | 7470A | 408822 |

Analysis Batch: 409010

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 7471B | 408789 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Analysis Batch: 409010 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-25 | 3160-5-3 (0-1.2') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-26 | 3160-5-2 (0-1.2') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-27 | 3160-5-1 (0-1.2') | Total/NA | Solid | 7471B | 408790 |
| MB 500-408789/35-A | Method Blank | Total/NA | Solid | 7471B | 408789 |
| MB 500-408790/12-A | Method Blank | Total/NA | Solid | 7471B | 408790 |
| LCS 500-408789/36-A | Lab Control Sample | Total/NA | Solid | 7471B | 408789 |
| LCS 500-408790/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 408790 |
| 500-136756-8 MS | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-8 MSD | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-22 MS | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-22 MSD | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | 408790 |
| 500-136756-8 DU | 3160-36-7 (0-3') | Total/NA | Solid | 7471B | 408789 |
| 500-136756-22 DU | 3160-21-3 (0-2.5') | Total/NA | Solid | 7471B | 408790 |

Prep Batch: 409049

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-3 | 3160-51-1 (0-1.5') | SPLP East | Solid | 3010A | 408829 |
| 500-136756-6 | 3160-36-9 (0-3') | SPLP East | Solid | 3010A | 408829 |
| 500-136756-8 | 3160-36-7 (0-3') | SPLP East | Solid | 3010A | 408829 |
| 500-136756-9 | 3160-36-6 (0-3') | SPLP East | Solid | 3010A | 408829 |
| 500-136756-10 | 3160-36-5 (0-3') | SPLP East | Solid | 3010A | 408829 |
| 500-136756-12 | 3160-36-3 (0-3') | SPLP East | Solid | 3010A | 408829 |
| 500-136756-13 | 3160-36-2 (0-3') | SPLP East | Solid | 3010A | 408829 |
| LB 500-408829/1-B | Method Blank | SPLP East | Solid | 3010A | 408829 |
| LCS 500-409049/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Analysis Batch: 409155

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-2 | 3160-51-2 (0-1.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-3 | 3160-51-1 (0-1.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-4 | 3160-36-11 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-5 | 3160-36-10 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-6 | 3160-36-9 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-7 | 3160-36-8 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-8 | 3160-36-7 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-9 | 3160-36-6 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-10 | 3160-36-5 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-11 | 3160-36-4 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-12 | 3160-36-3 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-13 | 3160-36-2 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-14 | 3160-36-1 (0-3') | TCLP | Solid | 6010B | 408963 |
| 500-136756-15 | 3160-21-10 (0-2.5') | TCLP | Solid | 6010B | 408963 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Analysis Batch: 409155 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-16 | 3160-21-9 (0-2.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-17 | 3160-21-8 (0-2.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-18 | 3160-21-7 (0-2.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-19 | 3160-21-6 (0-2.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-20 | 3160-21-5 (0-2.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-21 | 3160-21-4 (0-2.5') | TCLP | Solid | 6010B | 408973 |
| 500-136756-22 | 3160-21-3 (0-2.5') | TCLP | Solid | 6010B | 408973 |
| 500-136756-23 | 3160-21-2 (0-2.5') | TCLP | Solid | 6010B | 408973 |
| 500-136756-24 | 3160-21-1 (0-2.5') | TCLP | Solid | 6010B | 408973 |
| 500-136756-25 | 3160-5-3 (0-1.2') | TCLP | Solid | 6010B | 408973 |
| 500-136756-26 | 3160-5-2 (0-1.2') | TCLP | Solid | 6010B | 408973 |
| 500-136756-27 | 3160-5-1 (0-1.2') | TCLP | Solid | 6010B | 408973 |
| LB 500-408821/1-B | Method Blank | TCLP | Solid | 6010B | 408963 |
| LB 500-408822/1-B | Method Blank | TCLP | Solid | 6010B | 408973 |
| LCS 500-408963/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408963 |
| LCS 500-408973/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408973 |
| 500-136756-20 MS | 3160-21-5 (0-2.5') | TCLP | Solid | 6010B | 408963 |
| 500-136756-20 DU | 3160-21-5 (0-2.5') | TCLP | Solid | 6010B | 408963 |

Analysis Batch: 409164

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 6010B | 408751 |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 6010B | 408751 |

Analysis Batch: 409165

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-25 | 3160-5-3 (0-1.2') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-26 | 3160-5-2 (0-1.2') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-27 | 3160-5-1 (0-1.2') | Total/NA | Solid | 6010B | 408945 |
| MB 500-408945/1-A | Method Blank | Total/NA | Solid | 6010B | 408945 |
| LCS 500-408945/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408945 |
| 500-136756-21 MS | 3160-21-4 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-21 MSD | 3160-21-4 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| 500-136756-21 DU | 3160-21-4 (0-2.5') | Total/NA | Solid | 6010B | 408945 |

Analysis Batch: 409195

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|--------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | TCLP | Solid | 7470A | 409004 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Analysis Batch: 409195 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-2 | 3160-51-2 (0-1.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-3 | 3160-51-1 (0-1.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-4 | 3160-36-11 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-5 | 3160-36-10 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-6 | 3160-36-9 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-7 | 3160-36-8 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-8 | 3160-36-7 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-9 | 3160-36-6 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-10 | 3160-36-5 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-11 | 3160-36-4 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-12 | 3160-36-3 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-13 | 3160-36-2 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-14 | 3160-36-1 (0-3') | TCLP | Solid | 7470A | 409004 |
| 500-136756-15 | 3160-21-10 (0-2.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-16 | 3160-21-9 (0-2.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-17 | 3160-21-8 (0-2.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-18 | 3160-21-7 (0-2.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-19 | 3160-21-6 (0-2.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-20 | 3160-21-5 (0-2.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-21 | 3160-21-4 (0-2.5') | TCLP | Solid | 7470A | 409005 |
| 500-136756-22 | 3160-21-3 (0-2.5') | TCLP | Solid | 7470A | 409005 |
| 500-136756-23 | 3160-21-2 (0-2.5') | TCLP | Solid | 7470A | 409005 |
| 500-136756-24 | 3160-21-1 (0-2.5') | TCLP | Solid | 7470A | 409005 |
| 500-136756-25 | 3160-5-3 (0-1.2') | TCLP | Solid | 7470A | 409005 |
| 500-136756-26 | 3160-5-2 (0-1.2') | TCLP | Solid | 7470A | 409005 |
| 500-136756-27 | 3160-5-1 (0-1.2') | TCLP | Solid | 7470A | 409005 |
| LB 500-408821/1-C | Method Blank | TCLP | Solid | 7470A | 409004 |
| LB 500-408822/1-C | Method Blank | TCLP | Solid | 7470A | 409005 |
| MB 500-409004/12-A | Method Blank | Total/NA | Solid | 7470A | 409004 |
| MB 500-409005/12-A | Method Blank | Total/NA | Solid | 7470A | 409005 |
| LCS 500-409004/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 409004 |
| LCS 500-409005/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 409005 |
| 500-136756-3 MS | 3160-51-1 (0-1.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-21 MS | 3160-21-4 (0-2.5') | TCLP | Solid | 7470A | 409005 |
| 500-136756-3 DU | 3160-51-1 (0-1.5') | TCLP | Solid | 7470A | 409004 |
| 500-136756-21 DU | 3160-21-4 (0-2.5') | TCLP | Solid | 7470A | 409005 |

Analysis Batch: 409318

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-3 | 3160-51-1 (0-1.5') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-6 | 3160-36-9 (0-3') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-8 | 3160-36-7 (0-3') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-9 | 3160-36-6 (0-3') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-10 | 3160-36-5 (0-3') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-12 | 3160-36-3 (0-3') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-13 | 3160-36-2 (0-3') | SPLP East | Solid | 6010B | 409049 |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 6010B | 408945 |
| LB 500-408829/1-B | Method Blank | SPLP East | Solid | 6010B | 409049 |
| LCS 500-409049/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 409049 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Metals (Continued)

Analysis Batch: 409365

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|---------------------|-----------|--------|--------|------------|
| 500-136756-9 | 3160-36-6 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-10 | 3160-36-5 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-11 | 3160-36-4 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-12 | 3160-36-3 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-13 | 3160-36-2 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-14 | 3160-36-1 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-15 | 3160-21-10 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-16 | 3160-21-9 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-17 | 3160-21-8 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-18 | 3160-21-7 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-19 | 3160-21-6 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-20 | 3160-21-5 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-21 | 3160-21-4 (0-2.5') | TCLP | Solid | 6020A | 408973 |
| 500-136756-22 | 3160-21-3 (0-2.5') | TCLP | Solid | 6020A | 408973 |
| 500-136756-23 | 3160-21-2 (0-2.5') | TCLP | Solid | 6020A | 408973 |
| 500-136756-24 | 3160-21-1 (0-2.5') | TCLP | Solid | 6020A | 408973 |
| 500-136756-25 | 3160-5-3 (0-1.2') | TCLP | Solid | 6020A | 408973 |
| 500-136756-26 | 3160-5-2 (0-1.2') | TCLP | Solid | 6020A | 408973 |
| 500-136756-27 | 3160-5-1 (0-1.2') | TCLP | Solid | 6020A | 408973 |
| LB 500-408822/1-B | Method Blank | TCLP | Solid | 6020A | 408973 |
| LCS 500-408973/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 408973 |
| 500-136756-20 MS | 3160-21-5 (0-2.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-20 DU | 3160-21-5 (0-2.5') | TCLP | Solid | 6020A | 408963 |

Prep Batch: 409447

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | SPLP East | Solid | 3010A | 408832 |
| LB 500-408832/1-C | Method Blank | SPLP East | Solid | 3010A | 408832 |
| LCS 500-409447/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Analysis Batch: 409604

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | SPLP East | Solid | 6010B | 409447 |
| LB 500-408832/1-C | Method Blank | SPLP East | Solid | 6010B | 409447 |
| LCS 500-409447/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 409447 |

Analysis Batch: 409646

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-2 | 3160-51-2 (0-1.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-3 | 3160-51-1 (0-1.5') | TCLP | Solid | 6020A | 408963 |
| 500-136756-4 | 3160-36-11 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-5 | 3160-36-10 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-6 | 3160-36-9 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-7 | 3160-36-8 (0-3') | TCLP | Solid | 6020A | 408963 |
| 500-136756-8 | 3160-36-7 (0-3') | TCLP | Solid | 6020A | 408963 |
| LB 500-408821/1-B | Method Blank | TCLP | Solid | 6020A | 408963 |
| LCS 500-408963/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 408963 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

General Chemistry

Analysis Batch: 408681

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|---------------------|-----------|--------|----------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | Moisture | |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | Moisture | |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-9 DU | 3160-36-6 (0-3') | Total/NA | Solid | Moisture | |

Analysis Batch: 408752

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | Moisture | |
| 500-136756-25 | 3160-5-3 (0-1.2') | Total/NA | Solid | Moisture | |
| 500-136756-26 | 3160-5-2 (0-1.2') | Total/NA | Solid | Moisture | |
| 500-136756-27 | 3160-5-1 (0-1.2') | Total/NA | Solid | Moisture | |
| 500-136756-21 DU | 3160-21-4 (0-2.5') | Total/NA | Solid | Moisture | |

Analysis Batch: 409641

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 500-136756-1 | 3160-51-3 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136756-2 | 3160-51-2 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136756-3 | 3160-51-1 (0-1.5') | Total/NA | Solid | 9045D | |
| 500-136756-4 | 3160-36-11 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-5 | 3160-36-10 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-6 | 3160-36-9 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-7 | 3160-36-8 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-8 | 3160-36-7 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-9 | 3160-36-6 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-10 | 3160-36-5 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-11 | 3160-36-4 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-12 | 3160-36-3 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-13 | 3160-36-2 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-14 | 3160-36-1 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-15 | 3160-21-10 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-16 | 3160-21-9 (0-2.5') | Total/NA | Solid | 9045D | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

General Chemistry (Continued)

Analysis Batch: 409641 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 500-136756-17 | 3160-21-8 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-18 | 3160-21-7 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-19 | 3160-21-6 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-20 | 3160-21-5 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-21 | 3160-21-4 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-22 | 3160-21-3 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-23 | 3160-21-2 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-24 | 3160-21-1 (0-2.5') | Total/NA | Solid | 9045D | |
| 500-136756-25 | 3160-5-3 (0-1.2') | Total/NA | Solid | 9045D | |
| 500-136756-26 | 3160-5-2 (0-1.2') | Total/NA | Solid | 9045D | |
| 500-136756-27 | 3160-5-1 (0-1.2') | Total/NA | Solid | 9045D | |
| 500-136756-8 DU | 3160-36-7 (0-3') | Total/NA | Solid | 9045D | |
| 500-136756-27 DU | 3160-5-1 (0-1.2') | Total/NA | Solid | 9045D | |

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | |
|-------------------|------------------------|--|------------------|-------------------|-----------------|
| | | BFB (75-131) | DBFM (75-126) | 12DCE (70-134) | TOL (75-124) |
| 500-136756-1 | 3160-51-3 (0-1.5') | 89 | 105 | 114 | 95 |
| 500-136756-2 | 3160-51-2 (0-1.5') | 88 | 106 | 112 | 94 |
| 500-136756-3 | 3160-51-1 (0-1.5') | 91 | 106 | 112 | 94 |
| 500-136756-4 | 3160-36-11 (0-3') | 96 | 105 | 112 | 94 |
| 500-136756-5 | 3160-36-10 (0-3') | 91 | 86 | 106 | 94 |
| 500-136756-6 | 3160-36-9 (0-3') | 90 | 107 | 108 | 96 |
| 500-136756-7 | 3160-36-8 (0-3') | 87 | 107 | 111 | 94 |
| 500-136756-8 | 3160-36-7 (0-3') | 87 | 104 | 112 | 95 |
| 500-136756-9 | 3160-36-6 (0-3') | 88 | 110 | 112 | 96 |
| 500-136756-10 | 3160-36-5 (0-3') | 95 | 108 | 109 | 95 |
| 500-136756-11 | 3160-36-4 (0-3') | 89 | 102 | 97 | 88 |
| 500-136756-12 | 3160-36-3 (0-3') | 89 | 94 | 102 | 95 |
| 500-136756-13 | 3160-36-2 (0-3') | 89 | 95 | 103 | 96 |
| 500-136756-14 | 3160-36-1 (0-3') | 88 | 108 | 112 | 96 |
| 500-136756-15 | 3160-21-10 (0-2.5') | 91 | 88 | 107 | 95 |
| 500-136756-16 | 3160-21-9 (0-2.5') | 89 | 97 | 108 | 95 |
| 500-136756-17 | 3160-21-8 (0-2.5') | 90 | 106 | 103 | 95 |
| 500-136756-18 | 3160-21-7 (0-2.5') | 89 | 104 | 98 | 97 |
| 500-136756-19 | 3160-21-6 (0-2.5') | 86 | 106 | 101 | 96 |
| 500-136756-20 | 3160-21-5 (0-2.5') | 90 | 82 | 89 | 96 |
| 500-136756-21 | 3160-21-4 (0-2.5') | 85 | 105 | 104 | 96 |
| 500-136756-22 | 3160-21-3 (0-2.5') | 88 | 108 | 110 | 95 |
| 500-136756-23 | 3160-21-2 (0-2.5') | 89 | 107 | 114 | 95 |
| 500-136756-24 | 3160-21-1 (0-2.5') | 90 | 95 | 104 | 96 |
| LCS 500-408744/4 | Lab Control Sample | 90 | 97 | 91 | 98 |
| LCS 500-408942/4 | Lab Control Sample | 85 | 100 | 104 | 97 |
| LCSD 500-408744/5 | Lab Control Sample Dup | 89 | 91 | 92 | 99 |
| LCSD 500-408942/5 | Lab Control Sample Dup | 90 | 96 | 92 | 110 |
| MB 500-408744/6 | Method Blank | 87 | 124 | 106 | 95 |
| MB 500-408942/7 | Method Blank | 88 | 100 | 100 | 96 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|------------------|--------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | FBP (44-121) | 2FP (46-133) | NBZ (41-120) | PHL (46-125) | TPH (35-160) | TBP (25-139) |
| 500-136756-1 | 3160-51-3 (0-1.5') | 84 | 96 | 86 | 97 | 98 | 67 |
| 500-136756-1 MS | 3160-51-3 (0-1.5') | 85 | 105 | 83 | 107 | 96 | 77 |
| 500-136756-1 MSD | 3160-51-3 (0-1.5') | 81 | 105 | 82 | 114 | 95 | 74 |
| 500-136756-2 | 3160-51-2 (0-1.5') | 95 | 102 | 90 | 107 | 99 | 79 |
| 500-136756-3 | 3160-51-1 (0-1.5') | 84 | 97 | 81 | 94 | 99 | 71 |
| 500-136756-4 | 3160-36-11 (0-3') | 85 | 100 | 87 | 97 | 99 | 60 |

TestAmerica Chicago

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|--------------------|---------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | FBP (44-121) | 2FP (46-133) | NBZ (41-120) | PHL (46-125) | TPH (35-160) | TBP (25-139) |
| 500-136756-5 | 3160-36-10 (0-3') | 91 | 104 | 92 | 91 | 103 | 57 |
| 500-136756-6 | 3160-36-9 (0-3') | 92 | 98 | 91 | 98 | 94 | 78 |
| 500-136756-7 | 3160-36-8 (0-3') | 80 | 92 | 81 | 90 | 94 | 61 |
| 500-136756-8 | 3160-36-7 (0-3') | 78 | 88 | 88 | 86 | 90 | 80 |
| 500-136756-9 | 3160-36-6 (0-3') | 99 | 86 | 76 | 83 | 88 | 85 |
| 500-136756-10 | 3160-36-5 (0-3') | 83 | 91 | 67 | 88 | 91 | 84 |
| 500-136756-11 | 3160-36-4 (0-3') | 84 | 106 | 80 | 89 | 96 | 88 |
| 500-136756-12 | 3160-36-3 (0-3') | 81 | 103 | 79 | 89 | 94 | 82 |
| 500-136756-13 | 3160-36-2 (0-3') | 79 | 74 | 96 | 89 | 89 | 84 |
| 500-136756-14 | 3160-36-1 (0-3') | 79 | 75 | 93 | 90 | 90 | 72 |
| 500-136756-15 | 3160-21-10 (0-2.5') | 92 | 104 | 94 | 100 | 97 | 65 |
| 500-136756-16 | 3160-21-9 (0-2.5') | 83 | 95 | 85 | 92 | 91 | 59 |
| 500-136756-17 | 3160-21-8 (0-2.5') | 83 | 93 | 82 | 92 | 92 | 77 |
| 500-136756-18 | 3160-21-7 (0-2.5') | 89 | 100 | 92 | 98 | 92 | 62 |
| 500-136756-19 | 3160-21-6 (0-2.5') | 87 | 96 | 85 | 95 | 92 | 80 |
| 500-136756-20 | 3160-21-5 (0-2.5') | 59 | 63 | 58 | 64 | 66 | 46 |
| 500-136756-21 | 3160-21-4 (0-2.5') | 73 | 73 | 67 | 70 | 89 | 71 |
| 500-136756-22 | 3160-21-3 (0-2.5') | 74 | 73 | 67 | 85 | 91 | 89 |
| 500-136756-23 | 3160-21-2 (0-2.5') | 81 | 73 | 76 | 83 | 85 | 62 |
| 500-136756-24 | 3160-21-1 (0-2.5') | 70 | 76 | 64 | 66 | 73 | 49 |
| LCS 500-409279/2-A | Lab Control Sample | 89 | 90 | 88 | 91 | 93 | 96 |
| LCS 500-409340/2-A | Lab Control Sample | 86 | 90 | 82 | 91 | 84 | 91 |
| MB 500-409279/1-A | Method Blank | 82 | 76 | 74 | 81 | 84 | 39 |
| MB 500-409340/1-A | Method Blank | 84 | 91 | 80 | 89 | 88 | 78 |

Surrogate Legend

- FBP = 2-Fluorobiphenyl
- 2FP = 2-Fluorophenol
- NBZ = Nitrobenzene-d5
- PHL = Phenol-d5
- TPH = Terphenyl-d14
- TBP = 2,4,6-Tribromophenol

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408744/6
Matrix: Solid
Analysis Batch: 408744

Client Sample ID: Method Blank
Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/07/17 10:57 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/07/17 10:57 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/07/17 10:57 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/07/17 10:57 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/07/17 10:57 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/07/17 10:57 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/07/17 10:57 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87 | | 75 - 131 | | 11/07/17 10:57 | 1 |
| Dibromofluoromethane | 124 | | 75 - 126 | | 11/07/17 10:57 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 106 | | 70 - 134 | | 11/07/17 10:57 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | | 11/07/17 10:57 | 1 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408744/4

Matrix: Solid

Analysis Batch: 408744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0474 | | mg/Kg | | 95 | 40 - 150 |
| Benzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 67 - 129 |
| Bromoform | 0.0500 | 0.0488 | | mg/Kg | | 98 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0502 | | mg/Kg | | 100 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0262 | | mg/Kg | | 52 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0518 | | mg/Kg | | 104 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0521 | | mg/Kg | | 104 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0474 | | mg/Kg | | 95 | 75 - 125 |
| Chloroform | 0.0500 | 0.0473 | | mg/Kg | | 95 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0435 | | mg/Kg | | 87 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0409 | | mg/Kg | | 82 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0514 | | mg/Kg | | 103 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0460 | | mg/Kg | | 92 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0521 | | mg/Kg | | 104 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0540 | | mg/Kg | | 108 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0502 | | mg/Kg | | 100 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0332 | | mg/Kg | | 66 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0477 | | mg/Kg | | 95 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0342 | | mg/Kg | | 68 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0444 | | mg/Kg | | 89 | 50 - 140 |
| Styrene | 0.0500 | 0.0512 | | mg/Kg | | 102 | 70 - 125 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0477 | | mg/Kg | | 95 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 124 |
| Toluene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0472 | | mg/Kg | | 94 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0477 | | mg/Kg | | 95 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0508 | | mg/Kg | | 102 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0495 | | mg/Kg | | 99 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0437 | | mg/Kg | | 87 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0452 | | mg/Kg | | 90 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.100 | | mg/Kg | | 100 | 53 - 147 |

| Surrogate | LCS LCS | | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 |
| Dibromofluoromethane | 97 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 70 - 134 |
| Toluene-d8 (Surr) | 98 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-408744/5

Matrix: Solid

Analysis Batch: 408744

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0556 | | mg/Kg | | 111 | 40 - 150 | 16 | 30 |
| Benzene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 125 | 1 | 30 |
| Bromodichloromethane | 0.0500 | 0.0495 | | mg/Kg | | 99 | 67 - 129 | 1 | 30 |
| Bromoform | 0.0500 | 0.0492 | | mg/Kg | | 98 | 68 - 136 | 1 | 30 |
| Bromomethane | 0.0500 | 0.0443 | | mg/Kg | | 89 | 70 - 130 | 13 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0290 | | mg/Kg | | 58 | 47 - 138 | 10 | 30 |
| Carbon disulfide | 0.0500 | 0.0516 | | mg/Kg | | 103 | 70 - 129 | 1 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0516 | | mg/Kg | | 103 | 75 - 125 | 1 | 30 |
| Chlorobenzene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 50 - 150 | 0 | 30 |
| Chloroethane | 0.0500 | 0.0458 | | mg/Kg | | 92 | 75 - 125 | 3 | 30 |
| Chloroform | 0.0500 | 0.0426 | | mg/Kg | | 85 | 57 - 135 | 10 | 30 |
| Chloromethane | 0.0500 | 0.0443 | | mg/Kg | | 89 | 70 - 125 | 2 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0392 | | mg/Kg | | 78 | 70 - 125 | 4 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 | 2 | 30 |
| Dibromochloromethane | 0.0500 | 0.0514 | | mg/Kg | | 103 | 69 - 125 | 0 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 125 | 5 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0526 | | mg/Kg | | 105 | 70 - 130 | 1 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0532 | | mg/Kg | | 106 | 70 - 120 | 1 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 70 - 125 | 3 | 30 |
| Ethylbenzene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 61 - 136 | 1 | 30 |
| 2-Hexanone | 0.0500 | 0.0373 | | mg/Kg | | 75 | 48 - 146 | 12 | 30 |
| Methylene Chloride | 0.0500 | 0.0487 | | mg/Kg | | 97 | 70 - 126 | 2 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0381 | | mg/Kg | | 76 | 50 - 148 | 11 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0446 | | mg/Kg | | 89 | 50 - 140 | 0 | 30 |
| Styrene | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 | 1 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0472 | | mg/Kg | | 94 | 70 - 122 | 1 | 30 |
| Tetrachloroethene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 70 - 124 | 2 | 30 |
| Toluene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 | 2 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 70 - 125 | 2 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 125 | 0 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 70 - 128 | 3 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 | 1 | 30 |
| Trichloroethene | 0.0500 | 0.0517 | | mg/Kg | | 103 | 70 - 125 | 2 | 30 |
| Vinyl acetate | 0.0500 | 0.0427 | | mg/Kg | | 85 | 40 - 153 | 2 | 30 |
| Vinyl chloride | 0.0500 | 0.0456 | | mg/Kg | | 91 | 70 - 125 | 1 | 30 |
| Xylenes, Total | 0.100 | 0.0999 | | mg/Kg | | 100 | 53 - 147 | 1 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 89 | | 75 - 131 |
| Dibromofluoromethane | 91 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 70 - 134 |
| Toluene-d8 (Surr) | 99 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-408942/7

Matrix: Solid

Analysis Batch: 408942

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/08/17 11:07 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/08/17 11:07 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/08/17 11:07 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/08/17 11:07 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/08/17 11:07 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | | 11/08/17 11:07 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | | 11/08/17 11:07 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | | 11/08/17 11:07 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | | 11/08/17 11:07 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408942/4

Matrix: Solid

Analysis Batch: 408942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0590 | | mg/Kg | | 118 | 40 - 150 |
| Benzene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0524 | | mg/Kg | | 105 | 67 - 129 |
| Bromoform | 0.0500 | 0.0557 | | mg/Kg | | 111 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0438 | | mg/Kg | | 88 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0573 | | mg/Kg | | 115 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0473 | | mg/Kg | | 95 | 75 - 125 |
| Chloroform | 0.0500 | 0.0525 | | mg/Kg | | 105 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0402 | | mg/Kg | | 80 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0547 | | mg/Kg | | 109 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0586 | | mg/Kg | | 117 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0527 | | mg/Kg | | 105 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0384 | | mg/Kg | | 77 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0468 | | mg/Kg | | 94 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0382 | | mg/Kg | | 76 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0543 | | mg/Kg | | 109 | 50 - 140 |
| Styrene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 70 - 125 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0464 | | mg/Kg | | 93 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 124 |
| Toluene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0516 | | mg/Kg | | 103 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0557 | | mg/Kg | | 111 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0518 | | mg/Kg | | 104 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0425 | | mg/Kg | | 85 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.0998 | | mg/Kg | | 100 | 53 - 147 |

| Surrogate | LCS LCS | | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 85 | | 75 - 131 |
| Dibromofluoromethane | 100 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 104 | | 70 - 134 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-408942/5

Matrix: Solid

Analysis Batch: 408942

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0497 | | mg/Kg | | 99 | 40 - 150 | 17 | 30 |
| Benzene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 125 | 3 | 30 |
| Bromodichloromethane | 0.0500 | 0.0497 | | mg/Kg | | 99 | 67 - 129 | 5 | 30 |
| Bromoform | 0.0500 | 0.0537 | | mg/Kg | | 107 | 68 - 136 | 4 | 30 |
| Bromomethane | 0.0500 | 0.0385 | | mg/Kg | | 77 | 70 - 130 | 18 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0400 | | mg/Kg | | 80 | 47 - 138 | 9 | 30 |
| Carbon disulfide | 0.0500 | 0.0430 | | mg/Kg | | 86 | 70 - 129 | 12 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0516 | | mg/Kg | | 103 | 75 - 125 | 10 | 30 |
| Chlorobenzene | 0.0500 | 0.0430 | | mg/Kg | | 86 | 50 - 150 | 14 | 30 |
| Chloroethane | 0.0500 | 0.0462 | | mg/Kg | | 92 | 75 - 125 | 2 | 30 |
| Chloroform | 0.0500 | 0.0501 | | mg/Kg | | 100 | 57 - 135 | 5 | 30 |
| Chloromethane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 70 - 125 | 9 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 | 0 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0546 | | mg/Kg | | 109 | 70 - 125 | 10 | 30 |
| Dibromochloromethane | 0.0500 | 0.0517 | | mg/Kg | | 103 | 69 - 125 | 6 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0442 | | mg/Kg | | 88 | 70 - 125 | 12 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0522 | | mg/Kg | | 104 | 70 - 130 | 12 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0505 | | mg/Kg | | 101 | 70 - 120 | 4 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 125 | 3 | 30 |
| Ethylbenzene | 0.0500 | 0.0449 | | mg/Kg | | 90 | 61 - 136 | 7 | 30 |
| 2-Hexanone | 0.0500 | 0.0374 | | mg/Kg | | 75 | 48 - 146 | 3 | 30 |
| Methylene Chloride | 0.0500 | 0.0429 | | mg/Kg | | 86 | 70 - 126 | 9 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0414 | | mg/Kg | | 83 | 50 - 148 | 8 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0400 | | mg/Kg | | 80 | 50 - 140 | 30 | 30 |
| Styrene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 125 | 1 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0465 | | mg/Kg | | 93 | 70 - 122 | 0 | 30 |
| Tetrachloroethene | 0.0500 | 0.0526 | | mg/Kg | | 105 | 70 - 124 | 3 | 30 |
| Toluene | 0.0500 | 0.0558 | | mg/Kg | | 112 | 70 - 125 | 15 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0397 | | mg/Kg | | 79 | 70 - 125 | 23 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0548 | | mg/Kg | | 110 | 70 - 125 | 6 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 128 | 10 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0550 | | mg/Kg | | 110 | 70 - 125 | 7 | 30 |
| Trichloroethene | 0.0500 | 0.0513 | | mg/Kg | | 103 | 70 - 125 | 1 | 30 |
| Vinyl acetate | 0.0500 | 0.0429 | | mg/Kg | | 86 | 40 - 153 | 19 | 30 |
| Vinyl chloride | 0.0500 | 0.0467 | | mg/Kg | | 93 | 70 - 125 | 9 | 30 |
| Xylenes, Total | 0.100 | 0.0997 | | mg/Kg | | 100 | 53 - 147 | 0 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 |
| Dibromofluoromethane | 96 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 70 - 134 |
| Toluene-d8 (Surr) | 110 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-409279/1-A

Matrix: Solid

Analysis Batch: 409355

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 409279

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-409279/1-A
Matrix: Solid
Analysis Batch: 409355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409279

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/09/17 17:53 | 11/10/17 14:52 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 82 | | 44 - 121 | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2-Fluorophenol | 76 | | 46 - 133 | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Nitrobenzene-d5 | 74 | | 41 - 120 | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Phenol-d5 | 81 | | 46 - 125 | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| Terphenyl-d14 | 84 | | 35 - 160 | 11/09/17 17:53 | 11/10/17 14:52 | 1 |
| 2,4,6-Tribromophenol | 39 | | 25 - 139 | 11/09/17 17:53 | 11/10/17 14:52 | 1 |

Lab Sample ID: LCS 500-409279/2-A
Matrix: Solid
Analysis Batch: 409355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409279

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 1.14 | | mg/Kg | | 85 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.16 | | mg/Kg | | 87 | 60 - 110 |
| Anthracene | 1.33 | 1.09 | | mg/Kg | | 82 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.27 | | mg/Kg | | 95 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.15 | | mg/Kg | | 86 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.26 | | mg/Kg | | 94 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.22 | | mg/Kg | | 91 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.24 | | mg/Kg | | 93 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.12 | | mg/Kg | | 84 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.14 | | mg/Kg | | 86 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.40 | | mg/Kg | | 105 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.21 | | mg/Kg | | 91 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.32 | | mg/Kg | | 99 | 61 - 116 |
| Carbazole | 1.33 | 1.32 | | mg/Kg | | 99 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 0.918 | | mg/Kg | | 69 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.21 | | mg/Kg | | 91 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.15 | | mg/Kg | | 87 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.15 | | mg/Kg | | 86 | 64 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409279/2-A
Matrix: Solid
Analysis Batch: 409355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409279

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Chlorophenyl phenyl ether | 1.33 | 1.16 | | mg/Kg | | 87 | 63 - 110 |
| Chrysene | 1.33 | 1.14 | | mg/Kg | | 86 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.29 | | mg/Kg | | 97 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.15 | | mg/Kg | | 87 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 1.10 | | mg/Kg | | 83 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 1.07 | | mg/Kg | | 80 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 1.09 | | mg/Kg | | 81 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 1.16 | | mg/Kg | | 87 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.22 | | mg/Kg | | 91 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.18 | | mg/Kg | | 88 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.34 | | mg/Kg | | 101 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.19 | | mg/Kg | | 90 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.22 | | mg/Kg | | 92 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.44 | | mg/Kg | | 54 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 1.13 | | mg/Kg | | 43 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.23 | | mg/Kg | | 92 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.15 | | mg/Kg | | 87 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.32 | | mg/Kg | | 99 | 63 - 119 |
| Fluoranthene | 1.33 | 1.21 | | mg/Kg | | 91 | 62 - 120 |
| Fluorene | 1.33 | 1.18 | | mg/Kg | | 88 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.18 | | mg/Kg | | 89 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 1.09 | | mg/Kg | | 82 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.807 | | mg/Kg | | 61 | 10 - 106 |
| Hexachloroethane | 1.33 | 1.11 | | mg/Kg | | 83 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.30 | | mg/Kg | | 97 | 57 - 127 |
| Isophorone | 1.33 | 1.08 | | mg/Kg | | 81 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.18 | | mg/Kg | | 89 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.34 | | mg/Kg | | 100 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.15 | | mg/Kg | | 87 | 57 - 120 |
| Naphthalene | 1.33 | 1.15 | | mg/Kg | | 86 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.19 | | mg/Kg | | 89 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.26 | | mg/Kg | | 95 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.73 | | mg/Kg | | 130 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.11 | | mg/Kg | | 83 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.26 | | mg/Kg | | 95 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 1.96 | | mg/Kg | | 74 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 1.18 | | mg/Kg | | 89 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.23 | | mg/Kg | | 92 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.14 | | mg/Kg | | 85 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.86 | | mg/Kg | | 70 | 13 - 112 |
| Phenanthrene | 1.33 | 1.35 | | mg/Kg | | 102 | 62 - 120 |
| Phenol | 1.33 | 1.12 | | mg/Kg | | 84 | 56 - 122 |
| Pyrene | 1.33 | 1.14 | | mg/Kg | | 86 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.14 | | mg/Kg | | 86 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.24 | | mg/Kg | | 93 | 57 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409279/2-A
Matrix: Solid
Analysis Batch: 409355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409279

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 89 | | 44 - 121 |
| 2-Fluorophenol | 90 | | 46 - 133 |
| Nitrobenzene-d5 | 88 | | 41 - 120 |
| Phenol-d5 | 91 | | 46 - 125 |
| Terphenyl-d14 | 93 | | 35 - 160 |
| 2,4,6-Tribromophenol | 96 | | 25 - 139 |

Lab Sample ID: MB 500-409340/1-A
Matrix: Solid
Analysis Batch: 409400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-409340/1-A
Matrix: Solid
Analysis Batch: 409400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/10/17 07:22 | 11/10/17 19:03 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 2-Fluorobiphenyl | 84 | | 44 - 121 | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2-Fluorophenol | 91 | | 46 - 133 | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Nitrobenzene-d5 | 80 | | 41 - 120 | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| Terphenyl-d14 | 88 | | 35 - 160 | 11/10/17 07:22 | 11/10/17 19:03 | 1 |
| 2,4,6-Tribromophenol | 78 | | 25 - 139 | 11/10/17 07:22 | 11/10/17 19:03 | 1 |

Lab Sample ID: LCS 500-409340/2-A
Matrix: Solid
Analysis Batch: 409400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | Spike Added | LCS | LCS | Unit | D | %Rec | %Rec. | Limits |
|----------------------|-------------|--------|-----------|-------|---|------|-------|----------|
| | | Result | Qualifier | | | | | |
| Acenaphthene | 1.33 | 1.07 | | mg/Kg | | 80 | | 58 - 110 |
| Acenaphthylene | 1.33 | 1.04 | | mg/Kg | | 78 | | 60 - 110 |
| Anthracene | 1.33 | 1.10 | | mg/Kg | | 82 | | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 1.03 | | mg/Kg | | 78 | | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.14 | | mg/Kg | | 85 | | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.12 | | mg/Kg | | 84 | | 62 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409340/2-A
Matrix: Solid
Analysis Batch: 409400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzo[g,h,i]perylene | 1.33 | 1.13 | | mg/Kg | | 84 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.11 | | mg/Kg | | 84 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.08 | | mg/Kg | | 81 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.05 | | mg/Kg | | 79 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.06 | | mg/Kg | | 79 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.11 | | mg/Kg | | 84 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.29 | | mg/Kg | | 97 | 61 - 116 |
| Carbazole | 1.33 | 1.17 | | mg/Kg | | 87 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 1.06 | | mg/Kg | | 79 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.08 | | mg/Kg | | 81 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.08 | | mg/Kg | | 81 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | 1.33 | 1.10 | | mg/Kg | | 83 | 63 - 110 |
| Chrysene | 1.33 | 1.02 | | mg/Kg | | 77 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.17 | | mg/Kg | | 87 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.10 | | mg/Kg | | 82 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 1.06 | | mg/Kg | | 79 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 1.03 | | mg/Kg | | 77 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 1.02 | | mg/Kg | | 76 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 0.927 | | mg/Kg | | 70 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.12 | | mg/Kg | | 84 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.10 | | mg/Kg | | 82 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.11 | | mg/Kg | | 83 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.10 | | mg/Kg | | 82 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.12 | | mg/Kg | | 84 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.55 | | mg/Kg | | 58 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 1.23 | | mg/Kg | | 46 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.14 | | mg/Kg | | 85 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.15 | | mg/Kg | | 87 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.13 | | mg/Kg | | 85 | 63 - 119 |
| Fluoranthene | 1.33 | 1.13 | | mg/Kg | | 84 | 62 - 120 |
| Fluorene | 1.33 | 1.10 | | mg/Kg | | 82 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.13 | | mg/Kg | | 85 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 1.04 | | mg/Kg | | 78 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.998 | | mg/Kg | | 75 | 10 - 106 |
| Hexachloroethane | 1.33 | 1.01 | | mg/Kg | | 76 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.15 | | mg/Kg | | 86 | 57 - 127 |
| Isophorone | 1.33 | 1.02 | | mg/Kg | | 77 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.09 | | mg/Kg | | 82 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.12 | | mg/Kg | | 84 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.12 | | mg/Kg | | 84 | 57 - 120 |
| Naphthalene | 1.33 | 1.08 | | mg/Kg | | 81 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.08 | | mg/Kg | | 81 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 0.944 | | mg/Kg | | 71 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.41 | | mg/Kg | | 106 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.11 | | mg/Kg | | 83 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.12 | | mg/Kg | | 84 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 2.21 | | mg/Kg | | 83 | 30 - 122 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409340/2-A
Matrix: Solid
Analysis Batch: 409400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|----------|
| N-Nitrosodi-n-propylamine | 1.33 | 1.08 | | mg/Kg | | 81 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.12 | | mg/Kg | | 84 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.08 | | mg/Kg | | 81 | 40 - 124 |
| Pentachlorophenol | 2.67 | 2.18 | | mg/Kg | | 82 | 13 - 112 |
| Phenanthrene | 1.33 | 1.09 | | mg/Kg | | 82 | 62 - 120 |
| Phenol | 1.33 | 1.13 | | mg/Kg | | 85 | 56 - 122 |
| Pyrene | 1.33 | 1.08 | | mg/Kg | | 81 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.08 | | mg/Kg | | 81 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.14 | | mg/Kg | | 86 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.11 | | mg/Kg | | 83 | 57 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 86 | | 44 - 121 |
| 2-Fluorophenol | 90 | | 46 - 133 |
| Nitrobenzene-d5 | 82 | | 41 - 120 |
| Phenol-d5 | 91 | | 46 - 125 |
| Terphenyl-d14 | 84 | | 35 - 160 |
| 2,4,6-Tribromophenol | 91 | | 25 - 139 |

Lab Sample ID: 500-136756-1 MS
Matrix: Solid
Analysis Batch: 409487

Client Sample ID: 3160-51-3 (0-1.5')
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Acenaphthene | <0.038 | | 1.52 | 1.32 | | mg/Kg | ☼ | 87 | 58 - 110 |
| Acenaphthylene | <0.038 | | 1.52 | 1.38 | | mg/Kg | ☼ | 90 | 60 - 110 |
| Anthracene | <0.038 | | 1.52 | 1.56 | | mg/Kg | ☼ | 103 | 63 - 110 |
| Benzo[a]anthracene | 0.016 | J | 1.52 | 1.60 | | mg/Kg | ☼ | 104 | 63 - 110 |
| Benzo[a]pyrene | 0.043 | | 1.52 | 1.55 | | mg/Kg | ☼ | 99 | 61 - 120 |
| Benzo[b]fluoranthene | 0.049 | | 1.52 | 1.52 | | mg/Kg | ☼ | 96 | 62 - 120 |
| Benzo[g,h,i]perylene | 0.043 | | 1.52 | 1.59 | | mg/Kg | ☼ | 102 | 64 - 120 |
| Benzo[k]fluoranthene | <0.038 | | 1.52 | 1.56 | | mg/Kg | ☼ | 102 | 65 - 120 |
| Bis(2-chloroethoxy)methane | <0.19 | | 1.52 | 1.34 | | mg/Kg | ☼ | 88 | 60 - 112 |
| Bis(2-chloroethyl)ether | <0.19 | F1 | 1.52 | 2.03 | F1 | mg/Kg | ☼ | 133 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 1.52 | 1.79 | | mg/Kg | ☼ | 117 | 63 - 118 |
| 4-Bromophenyl phenyl ether | <0.19 | | 1.52 | 1.48 | | mg/Kg | ☼ | 97 | 63 - 110 |
| Butyl benzyl phthalate | <0.19 | | 1.52 | 1.71 | | mg/Kg | ☼ | 112 | 61 - 116 |
| Carbazole | <0.19 | | 1.52 | 1.54 | | mg/Kg | ☼ | 101 | 59 - 158 |
| 4-Chloroaniline | <0.77 | | 1.52 | 1.31 | | mg/Kg | ☼ | 86 | 30 - 150 |
| 4-Chloro-3-methylphenol | <0.38 | | 1.52 | 1.48 | | mg/Kg | ☼ | 97 | 61 - 114 |
| 2-Chloronaphthalene | <0.19 | | 1.52 | 1.37 | | mg/Kg | ☼ | 90 | 64 - 110 |
| 2-Chlorophenol | <0.19 | | 1.52 | 1.50 | | mg/Kg | ☼ | 98 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 1.52 | 1.41 | | mg/Kg | ☼ | 92 | 63 - 110 |
| Chrysene | 0.019 | J | 1.52 | 1.49 | | mg/Kg | ☼ | 96 | 63 - 120 |
| Dibenz(a,h)anthracene | 0.039 | | 1.52 | 1.54 | | mg/Kg | ☼ | 99 | 64 - 119 |
| Dibenzofuran | <0.19 | | 1.52 | 1.41 | | mg/Kg | ☼ | 92 | 64 - 110 |
| 1,2-Dichlorobenzene | <0.19 | | 1.52 | 1.22 | | mg/Kg | ☼ | 80 | 62 - 110 |
| 1,3-Dichlorobenzene | <0.19 | | 1.52 | 1.14 | | mg/Kg | ☼ | 75 | 60 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136756-1 MS

Matrix: Solid

Analysis Batch: 409487

Client Sample ID: 3160-51-3 (0-1.5')

Prep Type: Total/NA

Prep Batch: 409340

| Analyte | Sample | Sample | Spike | MS | MS | Unit | D | %Rec | Limits |
|------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|
| | Result | Qualifier | Added | Result | Qualifier | | | | |
| 1,4-Dichlorobenzene | <0.19 | | 1.52 | 1.13 | | mg/Kg | ☼ | 74 | 61 - 110 |
| 3,3'-Dichlorobenzidine | <0.19 | | 1.52 | 0.796 | | mg/Kg | ☼ | 52 | 49 - 112 |
| 2,4-Dichlorophenol | <0.38 | | 1.52 | 1.32 | | mg/Kg | ☼ | 87 | 58 - 120 |
| Diethyl phthalate | <0.19 | | 1.52 | 1.57 | | mg/Kg | ☼ | 103 | 58 - 120 |
| 2,4-Dimethylphenol | <0.38 | | 1.52 | 1.34 | | mg/Kg | ☼ | 88 | 60 - 110 |
| Dimethyl phthalate | <0.19 | | 1.52 | 1.50 | | mg/Kg | ☼ | 99 | 64 - 110 |
| Di-n-butyl phthalate | <0.19 | | 1.52 | 1.64 | | mg/Kg | ☼ | 108 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 3.05 | 1.84 | | mg/Kg | ☼ | 60 | 10 - 110 |
| 2,4-Dinitrophenol | <0.77 | | 3.05 | 1.67 | | mg/Kg | ☼ | 55 | 10 - 100 |
| 2,4-Dinitrotoluene | <0.19 | | 1.52 | 1.45 | | mg/Kg | ☼ | 95 | 62 - 117 |
| 2,6-Dinitrotoluene | <0.19 | | 1.52 | 1.48 | | mg/Kg | ☼ | 97 | 67 - 120 |
| Di-n-octyl phthalate | <0.19 | | 1.52 | 1.73 | | mg/Kg | ☼ | 114 | 63 - 119 |
| Fluoranthene | 0.024 | J | 1.52 | 1.60 | | mg/Kg | ☼ | 104 | 62 - 120 |
| Fluorene | <0.038 | | 1.52 | 1.47 | | mg/Kg | ☼ | 96 | 62 - 120 |
| Hexachlorobenzene | <0.077 | | 1.52 | 1.42 | | mg/Kg | ☼ | 93 | 55 - 117 |
| Hexachlorobutadiene | <0.19 | | 1.52 | 1.05 | | mg/Kg | ☼ | 69 | 56 - 120 |
| Hexachlorocyclopentadiene | <0.77 | F1 | 1.52 | <0.77 | F1 | mg/Kg | ☼ | 0 | 10 - 106 |
| Hexachloroethane | <0.19 | | 1.52 | 1.16 | | mg/Kg | ☼ | 76 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 0.038 | | 1.52 | 1.61 | | mg/Kg | ☼ | 103 | 57 - 127 |
| Isophorone | <0.19 | | 1.52 | 1.30 | | mg/Kg | ☼ | 85 | 55 - 110 |
| 2-Methylnaphthalene | 0.022 | J | 1.52 | 1.30 | | mg/Kg | ☼ | 84 | 62 - 110 |
| 2-Methylphenol | <0.19 | | 1.52 | 1.62 | | mg/Kg | ☼ | 107 | 60 - 120 |
| 3 & 4 Methylphenol | <0.19 | | 1.52 | 1.62 | | mg/Kg | ☼ | 106 | 57 - 120 |
| Naphthalene | 0.0097 | J | 1.52 | 1.27 | | mg/Kg | ☼ | 83 | 63 - 110 |
| 2-Nitroaniline | <0.19 | | 1.52 | 1.72 | | mg/Kg | ☼ | 113 | 57 - 124 |
| 3-Nitroaniline | <0.38 | | 1.52 | 1.43 | | mg/Kg | ☼ | 94 | 40 - 122 |
| 4-Nitroaniline | <0.38 | | 1.52 | 1.79 | | mg/Kg | ☼ | 117 | 60 - 160 |
| Nitrobenzene | <0.038 | | 1.52 | 1.34 | | mg/Kg | ☼ | 88 | 60 - 116 |
| 2-Nitrophenol | <0.38 | | 1.52 | 1.31 | | mg/Kg | ☼ | 86 | 60 - 120 |
| 4-Nitrophenol | <0.77 | | 3.05 | 2.36 | | mg/Kg | ☼ | 77 | 30 - 122 |
| N-Nitrosodi-n-propylamine | <0.077 | | 1.52 | 1.57 | | mg/Kg | ☼ | 103 | 56 - 118 |
| N-Nitrosodiphenylamine | <0.19 | | 1.52 | 1.60 | | mg/Kg | ☼ | 105 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 1.52 | 1.70 | | mg/Kg | ☼ | 112 | 40 - 124 |
| Pentachlorophenol | <0.77 | | 3.05 | 1.25 | | mg/Kg | ☼ | 41 | 13 - 112 |
| Phenanthrene | 0.038 | | 1.52 | 1.59 | | mg/Kg | ☼ | 102 | 62 - 120 |
| Phenol | <0.19 | | 1.52 | 1.79 | | mg/Kg | ☼ | 117 | 56 - 122 |
| Pyrene | 0.029 | J | 1.52 | 1.54 | | mg/Kg | ☼ | 99 | 63 - 120 |
| 1,2,4-Trichlorobenzene | <0.19 | | 1.52 | 1.20 | | mg/Kg | ☼ | 79 | 62 - 110 |
| 2,4,5-Trichlorophenol | <0.38 | | 1.52 | 1.33 | | mg/Kg | ☼ | 87 | 50 - 120 |
| 2,4,6-Trichlorophenol | <0.38 | | 1.52 | 1.30 | | mg/Kg | ☼ | 85 | 57 - 120 |

| Surrogate | MS MS | | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 2-Fluorobiphenyl | 85 | | 44 - 121 |
| 2-Fluorophenol | 105 | | 46 - 133 |
| Nitrobenzene-d5 | 83 | | 41 - 120 |
| Phenol-d5 | 107 | | 46 - 125 |
| Terphenyl-d14 | 96 | | 35 - 160 |
| 2,4,6-Tribromophenol | 77 | | 25 - 139 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Lab Sample ID: 500-136756-1 MSD
Matrix: Solid
Analysis Batch: 409487

Client Sample ID: 3160-51-3 (0-1.5')
Prep Type: Total/NA
Prep Batch: 409340

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | RPD | Limit |
|-----------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | Limits | | |
| Acenaphthene | <0.038 | | 1.52 | 1.29 | | mg/Kg | ☼ | 85 | 58 - 110 | 2 | 30 |
| Acenaphthylene | <0.038 | | 1.52 | 1.38 | | mg/Kg | ☼ | 90 | 60 - 110 | 0 | 30 |
| Anthracene | <0.038 | | 1.52 | 1.55 | | mg/Kg | ☼ | 102 | 63 - 110 | 1 | 30 |
| Benzo[a]anthracene | 0.016 | J | 1.52 | 1.55 | | mg/Kg | ☼ | 101 | 63 - 110 | 3 | 30 |
| Benzo[a]pyrene | 0.043 | | 1.52 | 1.51 | | mg/Kg | ☼ | 96 | 61 - 120 | 3 | 30 |
| Benzo[b]fluoranthene | 0.049 | | 1.52 | 1.45 | | mg/Kg | ☼ | 92 | 62 - 120 | 4 | 30 |
| Benzo[g,h,i]perylene | 0.043 | | 1.52 | 1.49 | | mg/Kg | ☼ | 95 | 64 - 120 | 7 | 30 |
| Benzo[k]fluoranthene | <0.038 | | 1.52 | 1.52 | | mg/Kg | ☼ | 100 | 65 - 120 | 2 | 30 |
| Bis(2-chloroethoxy)methane | <0.19 | | 1.52 | 1.39 | | mg/Kg | ☼ | 91 | 60 - 112 | 4 | 30 |
| Bis(2-chloroethyl)ether | <0.19 | F1 | 1.52 | 1.50 | | mg/Kg | ☼ | 99 | 55 - 111 | 30 | 30 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 1.52 | 1.73 | | mg/Kg | ☼ | 114 | 63 - 118 | 3 | 30 |
| 4-Bromophenyl phenyl ether | <0.19 | | 1.52 | 1.47 | | mg/Kg | ☼ | 96 | 63 - 110 | 1 | 30 |
| Butyl benzyl phthalate | <0.19 | | 1.52 | 1.67 | | mg/Kg | ☼ | 109 | 61 - 116 | 2 | 30 |
| Carbazole | <0.19 | | 1.52 | 1.50 | | mg/Kg | ☼ | 99 | 59 - 158 | 3 | 30 |
| 4-Chloroaniline | <0.77 | | 1.52 | 1.36 | | mg/Kg | ☼ | 89 | 30 - 150 | 4 | 30 |
| 4-Chloro-3-methylphenol | <0.38 | | 1.52 | 1.48 | | mg/Kg | ☼ | 97 | 61 - 114 | 0 | 30 |
| 2-Chloronaphthalene | <0.19 | | 1.52 | 1.33 | | mg/Kg | ☼ | 87 | 64 - 110 | 3 | 30 |
| 2-Chlorophenol | <0.19 | | 1.52 | 1.52 | | mg/Kg | ☼ | 100 | 64 - 110 | 2 | 30 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 1.52 | 1.40 | | mg/Kg | ☼ | 92 | 63 - 110 | 0 | 30 |
| Chrysene | 0.019 | J | 1.52 | 1.43 | | mg/Kg | ☼ | 93 | 63 - 120 | 4 | 30 |
| Dibenz(a,h)anthracene | 0.039 | | 1.52 | 1.45 | | mg/Kg | ☼ | 93 | 64 - 119 | 6 | 30 |
| Dibenzofuran | <0.19 | | 1.52 | 1.39 | | mg/Kg | ☼ | 91 | 64 - 110 | 1 | 30 |
| 1,2-Dichlorobenzene | <0.19 | | 1.52 | 1.21 | | mg/Kg | ☼ | 80 | 62 - 110 | 1 | 30 |
| 1,3-Dichlorobenzene | <0.19 | | 1.52 | 1.17 | | mg/Kg | ☼ | 76 | 60 - 110 | 3 | 30 |
| 1,4-Dichlorobenzene | <0.19 | | 1.52 | 1.20 | | mg/Kg | ☼ | 78 | 61 - 110 | 6 | 30 |
| 3,3'-Dichlorobenzidine | <0.19 | | 1.52 | 0.918 | | mg/Kg | ☼ | 60 | 49 - 112 | 14 | 30 |
| 2,4-Dichlorophenol | <0.38 | | 1.52 | 1.37 | | mg/Kg | ☼ | 90 | 58 - 120 | 4 | 30 |
| Diethyl phthalate | <0.19 | | 1.52 | 1.54 | | mg/Kg | ☼ | 101 | 58 - 120 | 2 | 30 |
| 2,4-Dimethylphenol | <0.38 | | 1.52 | 1.35 | | mg/Kg | ☼ | 89 | 60 - 110 | 1 | 30 |
| Dimethyl phthalate | <0.19 | | 1.52 | 1.49 | | mg/Kg | ☼ | 98 | 64 - 110 | 1 | 30 |
| Di-n-butyl phthalate | <0.19 | | 1.52 | 1.61 | | mg/Kg | ☼ | 106 | 65 - 120 | 2 | 30 |
| 4,6-Dinitro-2-methylphenol | <0.77 | | 3.05 | 1.39 | | mg/Kg | ☼ | 46 | 10 - 110 | 28 | 30 |
| 2,4-Dinitrophenol | <0.77 | | 3.05 | 1.40 | | mg/Kg | ☼ | 46 | 10 - 100 | 18 | 30 |
| 2,4-Dinitrotoluene | <0.19 | | 1.52 | 1.44 | | mg/Kg | ☼ | 94 | 62 - 117 | 1 | 30 |
| 2,6-Dinitrotoluene | <0.19 | | 1.52 | 1.45 | | mg/Kg | ☼ | 95 | 67 - 120 | 2 | 30 |
| Di-n-octyl phthalate | <0.19 | | 1.52 | 1.60 | | mg/Kg | ☼ | 105 | 63 - 119 | 8 | 30 |
| Fluoranthene | 0.024 | J | 1.52 | 1.54 | | mg/Kg | ☼ | 99 | 62 - 120 | 4 | 30 |
| Fluorene | <0.038 | | 1.52 | 1.48 | | mg/Kg | ☼ | 97 | 62 - 120 | 1 | 30 |
| Hexachlorobenzene | <0.077 | | 1.52 | 1.39 | | mg/Kg | ☼ | 91 | 55 - 117 | 2 | 30 |
| Hexachlorobutadiene | <0.19 | | 1.52 | 1.02 | | mg/Kg | ☼ | 67 | 56 - 120 | 3 | 30 |
| Hexachlorocyclopentadiene | <0.77 | F1 | 1.52 | <0.77 | F1 | mg/Kg | ☼ | 0 | 10 - 106 | NC | 30 |
| Hexachloroethane | <0.19 | | 1.52 | 1.18 | | mg/Kg | ☼ | 77 | 61 - 110 | 2 | 30 |
| Indeno[1,2,3-cd]pyrene | 0.038 | | 1.52 | 1.53 | | mg/Kg | ☼ | 98 | 57 - 127 | 5 | 30 |
| Isophorone | <0.19 | | 1.52 | 1.34 | | mg/Kg | ☼ | 88 | 55 - 110 | 3 | 30 |
| 2-Methylnaphthalene | 0.022 | J | 1.52 | 1.33 | | mg/Kg | ☼ | 86 | 62 - 110 | 2 | 30 |
| 2-Methylphenol | <0.19 | | 1.52 | 1.83 | | mg/Kg | ☼ | 120 | 60 - 120 | 12 | 30 |
| 3 & 4 Methylphenol | <0.19 | | 1.52 | 1.66 | | mg/Kg | ☼ | 109 | 57 - 120 | 2 | 30 |
| Naphthalene | 0.0097 | J | 1.52 | 1.29 | | mg/Kg | ☼ | 84 | 63 - 110 | 2 | 30 |
| 2-Nitroaniline | <0.19 | | 1.52 | 1.66 | | mg/Kg | ☼ | 109 | 57 - 124 | 3 | 30 |
| 3-Nitroaniline | <0.38 | | 1.52 | 1.39 | | mg/Kg | ☼ | 91 | 40 - 122 | 3 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-136756-1 MSD

Matrix: Solid

Analysis Batch: 409487

Client Sample ID: 3160-51-3 (0-1.5')

Prep Type: Total/NA

Prep Batch: 409340

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | Limits | RPD | Limit |
|------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|--------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | | | |
| 4-Nitroaniline | <0.38 | | 1.52 | 1.78 | | mg/Kg | ☼ | 117 | 60 - 160 | 1 | 30 | |
| Nitrobenzene | <0.038 | | 1.52 | 1.35 | | mg/Kg | ☼ | 89 | 60 - 116 | 1 | 30 | |
| 2-Nitrophenol | <0.38 | | 1.52 | 1.37 | | mg/Kg | ☼ | 90 | 60 - 120 | 5 | 30 | |
| 4-Nitrophenol | <0.77 | | 3.05 | 2.27 | | mg/Kg | ☼ | 74 | 30 - 122 | 4 | 30 | |
| N-Nitrosodi-n-propylamine | <0.077 | | 1.52 | 1.57 | | mg/Kg | ☼ | 103 | 56 - 118 | 0 | 30 | |
| N-Nitrosodiphenylamine | <0.19 | | 1.52 | 1.55 | | mg/Kg | ☼ | 102 | 65 - 112 | 3 | 30 | |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 1.52 | 1.71 | | mg/Kg | ☼ | 112 | 40 - 124 | 1 | 30 | |
| Pentachlorophenol | <0.77 | | 3.05 | 1.17 | | mg/Kg | ☼ | 38 | 13 - 112 | 7 | 30 | |
| Phenanthrene | 0.038 | | 1.52 | 1.52 | | mg/Kg | ☼ | 97 | 62 - 120 | 4 | 30 | |
| Phenol | <0.19 | | 1.52 | 1.76 | | mg/Kg | ☼ | 116 | 56 - 122 | 1 | 30 | |
| Pyrene | 0.029 | J | 1.52 | 1.52 | | mg/Kg | ☼ | 98 | 63 - 120 | 1 | 30 | |
| 1,2,4-Trichlorobenzene | <0.19 | | 1.52 | 1.23 | | mg/Kg | ☼ | 81 | 62 - 110 | 3 | 30 | |
| 2,4,5-Trichlorophenol | <0.38 | | 1.52 | 1.29 | | mg/Kg | ☼ | 85 | 50 - 120 | 3 | 30 | |
| 2,4,6-Trichlorophenol | <0.38 | | 1.52 | 1.25 | | mg/Kg | ☼ | 82 | 57 - 120 | 4 | 30 | |

| Surrogate | MSD | MSD | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 2-Fluorobiphenyl | 81 | | 44 - 121 |
| 2-Fluorophenol | 105 | | 46 - 133 |
| Nitrobenzene-d5 | 82 | | 41 - 120 |
| Phenol-d5 | 114 | | 46 - 125 |
| Terphenyl-d14 | 95 | | 35 - 160 |
| 2,4,6-Tribromophenol | 74 | | 25 - 139 |

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-408751/1-A

Matrix: Solid

Analysis Batch: 408958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 408751

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|-------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Cadmium | <0.20 | | 0.20 | 0.036 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/07/17 08:10 | 11/07/17 19:07 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-408751/2-A
Matrix: Solid
Analysis Batch: 408958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408751

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|-------|---|------|----------|
| Antimony | 50.0 | 46.4 | | mg/Kg | | 93 | 80 - 120 |
| Arsenic | 10.0 | 9.09 | | mg/Kg | | 91 | 80 - 120 |
| Barium | 200 | 193 | | mg/Kg | | 97 | 80 - 120 |
| Beryllium | 5.00 | 4.70 | | mg/Kg | | 94 | 80 - 120 |
| Cadmium | 5.00 | 4.84 | | mg/Kg | | 97 | 80 - 120 |
| Chromium | 20.0 | 19.4 | | mg/Kg | | 97 | 80 - 120 |
| Cobalt | 50.0 | 47.9 | | mg/Kg | | 96 | 80 - 120 |
| Copper | 25.0 | 24.6 | | mg/Kg | | 98 | 80 - 120 |
| Iron | 100 | 101 | | mg/Kg | | 101 | 80 - 120 |
| Lead | 10.0 | 9.02 | | mg/Kg | | 90 | 80 - 120 |
| Manganese | 50.0 | 47.1 | | mg/Kg | | 94 | 80 - 120 |
| Nickel | 50.0 | 47.9 | | mg/Kg | | 96 | 80 - 120 |
| Selenium | 10.0 | 9.11 | | mg/Kg | | 91 | 80 - 120 |
| Silver | 5.00 | 4.69 | | mg/Kg | | 94 | 80 - 120 |
| Thallium | 10.0 | 8.81 | | mg/Kg | | 88 | 80 - 120 |
| Vanadium | 50.0 | 48.4 | | mg/Kg | | 97 | 80 - 120 |
| Zinc | 50.0 | 47.2 | | mg/Kg | | 94 | 80 - 120 |

Lab Sample ID: 500-136756-1 MS
Matrix: Solid
Analysis Batch: 408958

Client Sample ID: 3160-51-3 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408751

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Antimony | 0.43 | J F1 | 27.2 | 4.81 | F1 | mg/Kg | ☼ | 16 | 75 - 125 |
| Arsenic | 6.8 | F1 | 5.43 | 10.3 | F1 | mg/Kg | ☼ | 64 | 75 - 125 |
| Barium | 89 | F1 | 109 | 167 | F1 | mg/Kg | ☼ | 72 | 75 - 125 |
| Beryllium | 0.49 | | 2.72 | 2.65 | | mg/Kg | ☼ | 80 | 75 - 125 |
| Cadmium | 0.24 | | 2.72 | 2.28 | | mg/Kg | ☼ | 75 | 75 - 125 |
| Chromium | 15 | F1 | 10.9 | 27.9 | | mg/Kg | ☼ | 120 | 75 - 125 |
| Cobalt | 5.2 | | 27.2 | 31.1 | | mg/Kg | ☼ | 95 | 75 - 125 |
| Copper | 14 | | 13.6 | 25.5 | | mg/Kg | ☼ | 84 | 75 - 125 |
| Iron | 16000 | | 54.3 | 17300 | 4 | mg/Kg | ☼ | 2864 | 75 - 125 |
| Lead | 99 | | 5.43 | 67.7 | 4 | mg/Kg | ☼ | -581 | 75 - 125 |
| Manganese | 200 | F2 | 27.2 | 150 | 4 | mg/Kg | ☼ | -187 | 75 - 125 |
| Nickel | 11 | | 27.2 | 37.3 | | mg/Kg | ☼ | 99 | 75 - 125 |
| Selenium | 0.49 | J F1 | 5.43 | 3.93 | F1 | mg/Kg | ☼ | 63 | 75 - 125 |
| Silver | <0.28 | F1 | 2.72 | 1.96 | F1 | mg/Kg | ☼ | 72 | 75 - 125 |
| Thallium | <0.56 | F1 | 5.43 | 3.85 | F1 | mg/Kg | ☼ | 71 | 75 - 125 |
| Vanadium | 22 | | 27.2 | 50.2 | | mg/Kg | ☼ | 103 | 75 - 125 |
| Zinc | 66 | F1 | 27.2 | 86.1 | F1 | mg/Kg | ☼ | 73 | 75 - 125 |

Lab Sample ID: 500-136756-1 MSD
Matrix: Solid
Analysis Batch: 408958

Client Sample ID: 3160-51-3 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408751

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-----------|
| Antimony | 0.43 | J F1 | 29.1 | 5.68 | F1 | mg/Kg | ☼ | 18 | 75 - 125 | 16 | 20 |
| Arsenic | 6.8 | F1 | 5.81 | 11.4 | | mg/Kg | ☼ | 79 | 75 - 125 | 10 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136756-1 MSD
Matrix: Solid
Analysis Batch: 408958

Client Sample ID: 3160-51-3 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408751

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | RPD | Limit |
|-----------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | | | |
| Barium | 89 | F1 | 116 | 187 | | mg/Kg | ☼ | 84 | 75 - 125 | 11 | 20 |
| Beryllium | 0.49 | | 2.91 | 2.95 | | mg/Kg | ☼ | 85 | 75 - 125 | 11 | 20 |
| Cadmium | 0.24 | | 2.91 | 2.68 | | mg/Kg | ☼ | 84 | 75 - 125 | 16 | 20 |
| Chromium | 15 | F1 | 11.6 | 29.6 | F1 | mg/Kg | ☼ | 126 | 75 - 125 | 6 | 20 |
| Cobalt | 5.2 | | 29.1 | 32.9 | | mg/Kg | ☼ | 95 | 75 - 125 | 6 | 20 |
| Copper | 14 | | 14.5 | 29.9 | | mg/Kg | ☼ | 109 | 75 - 125 | 16 | 20 |
| Iron | 16000 | | 58.1 | 17500 | 4 | mg/Kg | ☼ | 2937 | 75 - 125 | 1 | 20 |
| Lead | 99 | | 5.81 | 76.1 | 4 | mg/Kg | ☼ | -397 | 75 - 125 | 12 | 20 |
| Manganese | 200 | F2 | 29.1 | 204 | 4 F2 | mg/Kg | ☼ | 11 | 75 - 125 | 31 | 20 |
| Nickel | 11 | | 29.1 | 39.8 | | mg/Kg | ☼ | 101 | 75 - 125 | 6 | 20 |
| Selenium | 0.49 | J F1 | 5.81 | 4.42 | F1 | mg/Kg | ☼ | 68 | 75 - 125 | 12 | 20 |
| Silver | <0.28 | F1 | 2.91 | 2.30 | | mg/Kg | ☼ | 79 | 75 - 125 | 16 | 20 |
| Thallium | <0.56 | F1 | 5.81 | 4.40 | | mg/Kg | ☼ | 76 | 75 - 125 | 13 | 20 |
| Vanadium | 22 | | 29.1 | 52.0 | | mg/Kg | ☼ | 102 | 75 - 125 | 3 | 20 |
| Zinc | 66 | F1 | 29.1 | 95.6 | | mg/Kg | ☼ | 101 | 75 - 125 | 10 | 20 |

Lab Sample ID: 500-136756-1 DU
Matrix: Solid
Analysis Batch: 408958

Client Sample ID: 3160-51-3 (0-1.5')
Prep Type: Total/NA
Prep Batch: 408751

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|-----------|--------|-----------|-------|--------|-------|---|-----|-------|
| | Result | Qualifier | | Result | | | | |
| Antimony | 0.43 | J F1 | <1.1 | | mg/Kg | ☼ | NC | 20 |
| Arsenic | 6.8 | F1 | 6.11 | | mg/Kg | ☼ | 11 | 20 |
| Barium | 89 | F1 | 84.5 | | mg/Kg | ☼ | 6 | 20 |
| Beryllium | 0.49 | | 0.555 | | mg/Kg | ☼ | 13 | 20 |
| Cadmium | 0.24 | | 0.231 | | mg/Kg | ☼ | 5 | 20 |
| Chromium | 15 | F1 | 18.2 | | mg/Kg | ☼ | 20 | 20 |
| Cobalt | 5.2 | | 4.86 | | mg/Kg | ☼ | 7 | 20 |
| Copper | 14 | | 13.8 | | mg/Kg | ☼ | 2 | 20 |
| Iron | 16000 | | 15700 | | mg/Kg | ☼ | 0.3 | 20 |
| Lead | 99 | | 88.9 | | mg/Kg | ☼ | 11 | 20 |
| Manganese | 200 | F2 | 180 | | mg/Kg | ☼ | 11 | 20 |
| Nickel | 11 | | 10.5 | | mg/Kg | ☼ | 0 | 20 |
| Selenium | 0.49 | J F1 | 0.464 | J | mg/Kg | ☼ | 5 | 20 |
| Silver | <0.28 | F1 | <0.29 | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.56 | F1 | <0.57 | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 22 | | 22.6 | | mg/Kg | ☼ | 2 | 20 |
| Zinc | 66 | F1 | 68.7 | | mg/Kg | ☼ | 4 | 20 |

Lab Sample ID: MB 500-408945/1-A
Matrix: Solid
Analysis Batch: 409165

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408945

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|--------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | Result | | | | | |
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Cadmium | 0.0497 | J | 0.20 | 0.036 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-408945/1-A
Matrix: Solid
Analysis Batch: 409165

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408945

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|------|------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/08/17 07:33 | 11/09/17 02:50 | 1 |

Lab Sample ID: LCS 500-408945/2-A
Matrix: Solid
Analysis Batch: 409165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408945

| Analyte | Spike Added | LCS | LCS | Unit | D | %Rec | %Rec. | Limits |
|-----------|-------------|--------|-----------|-------|---|------|-------|----------|
| | | Result | Qualifier | | | | | |
| Antimony | 50.0 | 46.9 | | mg/Kg | | 94 | | 80 - 120 |
| Arsenic | 10.0 | 9.48 | | mg/Kg | | 95 | | 80 - 120 |
| Barium | 200 | 194 | | mg/Kg | | 97 | | 80 - 120 |
| Beryllium | 5.00 | 4.70 | | mg/Kg | | 94 | | 80 - 120 |
| Cadmium | 5.00 | 4.79 | | mg/Kg | | 96 | | 80 - 120 |
| Chromium | 20.0 | 18.9 | | mg/Kg | | 95 | | 80 - 120 |
| Cobalt | 50.0 | 47.4 | | mg/Kg | | 95 | | 80 - 120 |
| Copper | 25.0 | 24.7 | | mg/Kg | | 99 | | 80 - 120 |
| Iron | 100 | 98.3 | | mg/Kg | | 98 | | 80 - 120 |
| Lead | 10.0 | 9.20 | | mg/Kg | | 92 | | 80 - 120 |
| Manganese | 50.0 | 47.3 | | mg/Kg | | 95 | | 80 - 120 |
| Nickel | 50.0 | 47.5 | | mg/Kg | | 95 | | 80 - 120 |
| Selenium | 10.0 | 8.30 | | mg/Kg | | 83 | | 80 - 120 |
| Silver | 5.00 | 4.75 | | mg/Kg | | 95 | | 80 - 120 |
| Thallium | 10.0 | 9.01 | | mg/Kg | | 90 | | 80 - 120 |
| Vanadium | 50.0 | 48.5 | | mg/Kg | | 97 | | 80 - 120 |
| Zinc | 50.0 | 45.5 | | mg/Kg | | 91 | | 80 - 120 |

Lab Sample ID: 500-136756-21 MS
Matrix: Solid
Analysis Batch: 409165

Client Sample ID: 3160-21-4 (0-2.5')
Prep Type: Total/NA
Prep Batch: 408945

| Analyte | Sample | Sample | Spike Added | MS | MS | Unit | D | %Rec | %Rec. | Limits |
|-----------|--------|-----------|-------------|--------|-----------|-------|---|------|-------|----------|
| | Result | Qualifier | | Result | Qualifier | | | | | |
| Antimony | 0.49 | J F1 | 29.3 | 4.74 | F1 | mg/Kg | ☼ | 15 | | 75 - 125 |
| Arsenic | 7.6 | | 5.86 | 12.5 | | mg/Kg | ☼ | 85 | | 75 - 125 |
| Barium | 88 | | 117 | 229 | | mg/Kg | ☼ | 120 | | 75 - 125 |
| Beryllium | 0.47 | | 2.93 | 2.85 | | mg/Kg | ☼ | 81 | | 75 - 125 |
| Cadmium | 0.25 | B | 2.93 | 2.50 | | mg/Kg | ☼ | 77 | | 75 - 125 |
| Chromium | 16 | | 11.7 | 27.3 | | mg/Kg | ☼ | 95 | | 75 - 125 |
| Cobalt | 6.0 | | 29.3 | 35.7 | | mg/Kg | ☼ | 101 | | 75 - 125 |
| Copper | 21 | | 14.6 | 35.4 | | mg/Kg | ☼ | 98 | | 75 - 125 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136756-21 MS

Matrix: Solid

Analysis Batch: 409165

Client Sample ID: 3160-21-4 (0-2.5')

Prep Type: Total/NA

Prep Batch: 408945

| Analyte | Sample | Sample | Spike | MS | MS | Unit | D | %Rec | %Rec. | Limits |
|-----------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | |
| Iron | 18000 | | 58.6 | 19900 | 4 | mg/Kg | ☼ | 2387 | | 75 - 125 |
| Lead | 30 | | 5.86 | 48.8 | 4 | mg/Kg | ☼ | 321 | | 75 - 125 |
| Manganese | 220 | F2 | 29.3 | 610 | 4 | mg/Kg | ☼ | 1330 | | 75 - 125 |
| Nickel | 14 | | 29.3 | 43.2 | | mg/Kg | ☼ | 100 | | 75 - 125 |
| Selenium | <0.63 | F1 | 5.86 | 4.24 | F1 | mg/Kg | ☼ | 72 | | 75 - 125 |
| Silver | <0.32 | | 2.93 | 2.33 | | mg/Kg | ☼ | 80 | | 75 - 125 |
| Thallium | <0.63 | | 5.86 | 4.95 | | mg/Kg | ☼ | 85 | | 75 - 125 |
| Vanadium | 27 | | 29.3 | 55.4 | | mg/Kg | ☼ | 96 | | 75 - 125 |
| Zinc | 97 | F1 | 29.3 | 114 | F1 | mg/Kg | ☼ | 55 | | 75 - 125 |

Lab Sample ID: 500-136756-21 MSD

Matrix: Solid

Analysis Batch: 409165

Client Sample ID: 3160-21-4 (0-2.5')

Prep Type: Total/NA

Prep Batch: 408945

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. | Limits | RPD | Limit |
|-----------|--------|-----------|-------|--------|-----------|-------|---|------|-------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | | | |
| Antimony | 0.49 | J F1 | 30.6 | 5.03 | F1 | mg/Kg | ☼ | 15 | | 75 - 125 | 6 | 20 |
| Arsenic | 7.6 | | 6.12 | 12.7 | | mg/Kg | ☼ | 83 | | 75 - 125 | 1 | 20 |
| Barium | 88 | | 122 | 211 | | mg/Kg | ☼ | 101 | | 75 - 125 | 8 | 20 |
| Beryllium | 0.47 | | 3.06 | 2.95 | | mg/Kg | ☼ | 81 | | 75 - 125 | 3 | 20 |
| Cadmium | 0.25 | B | 3.06 | 2.57 | | mg/Kg | ☼ | 76 | | 75 - 125 | 3 | 20 |
| Chromium | 16 | | 12.2 | 27.9 | | mg/Kg | ☼ | 96 | | 75 - 125 | 2 | 20 |
| Cobalt | 6.0 | | 30.6 | 36.1 | | mg/Kg | ☼ | 98 | | 75 - 125 | 1 | 20 |
| Copper | 21 | | 15.3 | 33.2 | | mg/Kg | ☼ | 80 | | 75 - 125 | 6 | 20 |
| Iron | 18000 | | 61.2 | 19800 | 4 | mg/Kg | ☼ | 2117 | | 75 - 125 | 1 | 20 |
| Lead | 30 | | 6.12 | 45.7 | 4 | mg/Kg | ☼ | 256 | | 75 - 125 | 7 | 20 |
| Manganese | 220 | F2 | 30.6 | 450 | 4 F2 | mg/Kg | ☼ | 751 | | 75 - 125 | 30 | 20 |
| Nickel | 14 | | 30.6 | 43.2 | | mg/Kg | ☼ | 96 | | 75 - 125 | 0 | 20 |
| Selenium | <0.63 | F1 | 6.12 | 4.53 | F1 | mg/Kg | ☼ | 74 | | 75 - 125 | 7 | 20 |
| Silver | <0.32 | | 3.06 | 2.40 | | mg/Kg | ☼ | 78 | | 75 - 125 | 3 | 20 |
| Thallium | <0.63 | | 6.12 | 4.98 | | mg/Kg | ☼ | 81 | | 75 - 125 | 1 | 20 |
| Vanadium | 27 | | 30.6 | 58.8 | | mg/Kg | ☼ | 103 | | 75 - 125 | 6 | 20 |
| Zinc | 97 | F1 | 30.6 | 111 | F1 | mg/Kg | ☼ | 43 | | 75 - 125 | 3 | 20 |

Lab Sample ID: 500-136756-21 DU

Matrix: Solid

Analysis Batch: 409165

Client Sample ID: 3160-21-4 (0-2.5')

Prep Type: Total/NA

Prep Batch: 408945

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|-----------|--------|-----------|--------|-----------|-------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Antimony | 0.49 | J F1 | 0.471 | J | mg/Kg | ☼ | 3 | 20 |
| Arsenic | 7.6 | | 7.14 | | mg/Kg | ☼ | 6 | 20 |
| Barium | 88 | | 93.3 | | mg/Kg | ☼ | 6 | 20 |
| Beryllium | 0.47 | | 0.481 | | mg/Kg | ☼ | 2 | 20 |
| Cadmium | 0.25 | B | 0.203 | F5 | mg/Kg | ☼ | 22 | 20 |
| Chromium | 16 | | 16.0 | | mg/Kg | ☼ | 1 | 20 |
| Cobalt | 6.0 | | 6.54 | | mg/Kg | ☼ | 8 | 20 |
| Copper | 21 | | 22.0 | | mg/Kg | ☼ | 5 | 20 |
| Iron | 18000 | | 17900 | | mg/Kg | ☼ | 3 | 20 |
| Lead | 30 | | 42.7 | F3 | mg/Kg | ☼ | 35 | 20 |
| Manganese | 220 | F2 | 275 | F3 | mg/Kg | ☼ | 22 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136756-21 DU
Matrix: Solid
Analysis Batch: 409165

Client Sample ID: 3160-21-4 (0-2.5')
Prep Type: Total/NA
Prep Batch: 408945

| Analyte | Sample | Sample Qualifier | DU | DU | Unit | D | RPD | Limit |
|----------|--------|------------------|--------|-----------|-------|---|-----|-------|
| | Result | | Result | Qualifier | | | | |
| Nickel | 14 | | 14.5 | | mg/Kg | ☼ | 4 | 20 |
| Selenium | <0.63 | F1 | <0.64 | | mg/Kg | ☼ | NC | 20 |
| Silver | <0.32 | | <0.32 | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.63 | | <0.64 | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 27 | | 26.5 | | mg/Kg | ☼ | 2 | 20 |
| Zinc | 97 | F1 | 89.2 | | mg/Kg | ☼ | 9 | 20 |

Lab Sample ID: LCS 500-408963/2-A
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408963

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |
| Barium | 0.500 | 0.539 | | mg/L | | 108 | 80 - 120 |
| Beryllium | 0.0500 | 0.0529 | | mg/L | | 106 | 80 - 120 |
| Cadmium | 0.0500 | 0.0529 | | mg/L | | 106 | 80 - 120 |
| Chromium | 0.200 | 0.213 | | mg/L | | 107 | 80 - 120 |
| Cobalt | 0.500 | 0.531 | | mg/L | | 106 | 80 - 120 |
| Copper | 0.250 | 0.271 | | mg/L | | 109 | 80 - 120 |
| Iron | 1.00 | 1.13 | | mg/L | | 113 | 80 - 120 |
| Lead | 0.100 | 0.104 | | mg/L | | 104 | 80 - 120 |
| Manganese | 0.500 | 0.526 | | mg/L | | 105 | 80 - 120 |
| Nickel | 0.500 | 0.527 | | mg/L | | 105 | 80 - 120 |
| Selenium | 0.100 | 0.105 | | mg/L | | 105 | 80 - 120 |
| Silver | 0.0500 | 0.0511 | | mg/L | | 102 | 80 - 120 |
| Vanadium | 0.500 | 0.527 | | mg/L | | 105 | 80 - 120 |
| Zinc | 0.500 | 0.516 | | mg/L | | 103 | 80 - 120 |

Lab Sample ID: LCS 500-408973/2-A
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408973

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |
| Barium | 0.500 | 0.523 | | mg/L | | 105 | 80 - 120 |
| Beryllium | 0.0500 | 0.0508 | | mg/L | | 102 | 80 - 120 |
| Cadmium | 0.0500 | 0.0505 | | mg/L | | 101 | 80 - 120 |
| Chromium | 0.200 | 0.205 | | mg/L | | 103 | 80 - 120 |
| Cobalt | 0.500 | 0.505 | | mg/L | | 101 | 80 - 120 |
| Copper | 0.250 | 0.266 | | mg/L | | 106 | 80 - 120 |
| Iron | 1.00 | 1.07 | | mg/L | | 107 | 80 - 120 |
| Lead | 0.100 | 0.0951 | | mg/L | | 95 | 80 - 120 |
| Manganese | 0.500 | 0.504 | | mg/L | | 101 | 80 - 120 |
| Nickel | 0.500 | 0.499 | | mg/L | | 100 | 80 - 120 |
| Selenium | 0.100 | 0.101 | | mg/L | | 101 | 80 - 120 |
| Silver | 0.0500 | 0.0496 | | mg/L | | 99 | 80 - 120 |
| Vanadium | 0.500 | 0.513 | | mg/L | | 103 | 80 - 120 |
| Zinc | 0.500 | 0.489 | J | mg/L | | 98 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-409049/2-A
Matrix: Solid
Analysis Batch: 409318

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409049

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Lead | 0.100 | 0.0873 | | mg/L | | 87 | 80 - 120 |
| Manganese | 0.500 | 0.433 | | mg/L | | 87 | 80 - 120 |

Lab Sample ID: LCS 500-409447/2-A
Matrix: Solid
Analysis Batch: 409604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409447

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Manganese | 0.500 | 0.510 | | mg/L | | 102 | 80 - 120 |

Lab Sample ID: LB 500-408821/1-B
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408963

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Selenium | 0.0204 J | | 0.050 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 08:50 | 11/08/17 16:32 | 1 |

Lab Sample ID: 500-136756-20 MS
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: 3160-21-5 (0-2.5')
Prep Type: TCLP
Prep Batch: 408963

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Arsenic | <0.050 | | 0.100 | 0.108 | | mg/L | | 108 | 50 - 150 |
| Barium | 0.34 J | | 0.500 | 0.816 | | mg/L | | 96 | 50 - 150 |
| Beryllium | <0.0040 | | 0.0500 | 0.0527 | | mg/L | | 105 | 50 - 150 |
| Cadmium | <0.0050 | | 0.0500 | 0.0578 | | mg/L | | 116 | 50 - 150 |
| Chromium | <0.025 | | 0.200 | 0.198 | | mg/L | | 99 | 50 - 150 |
| Cobalt | <0.025 | | 0.500 | 0.519 | | mg/L | | 104 | 50 - 150 |
| Copper | 0.019 J | | 0.250 | 0.298 | | mg/L | | 112 | 50 - 150 |
| Iron | 0.87 | | 1.00 | 1.60 | | mg/L | | 73 | 50 - 150 |
| Lead | <0.0075 | | 0.100 | 0.0946 | | mg/L | | 95 | 50 - 150 |
| Manganese | 0.027 | | 0.500 | 0.503 | | mg/L | | 95 | 50 - 150 |
| Nickel | <0.025 | | 0.500 | 0.509 | | mg/L | | 102 | 50 - 150 |
| Selenium | <0.050 | | 0.100 | 0.113 | | mg/L | | 113 | 50 - 150 |
| Silver | <0.025 | | 0.0500 | 0.0598 | | mg/L | | 120 | 50 - 150 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136756-20 MS
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: 3160-21-5 (0-2.5')
Prep Type: TCLP
Prep Batch: 408963

| Analyte | Sample | Sample | Spike | MS | MS | Unit | D | %Rec | %Rec. | Limits |
|----------|--------|-----------|-------|--------|-----------|------|---|------|-------|----------|
| | Result | Qualifier | | Result | Qualifier | | | | | |
| Vanadium | <0.025 | | 0.500 | 0.498 | | mg/L | | 100 | | 50 - 150 |
| Zinc | 0.046 | J | 0.500 | 0.566 | | mg/L | | 104 | | 50 - 150 |

Lab Sample ID: 500-136756-20 DU
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: 3160-21-5 (0-2.5')
Prep Type: TCLP
Prep Batch: 408963

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | Limit |
|-----------|---------|-----------|---------|--------|------|---|-----|-------|
| | Result | Qualifier | | Result | | | | |
| Arsenic | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Barium | 0.34 | J | 0.330 | J | mg/L | | 1 | 20 |
| Beryllium | <0.0040 | | <0.0040 | | mg/L | | NC | 20 |
| Cadmium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Chromium | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Cobalt | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Copper | 0.019 | J | 0.0180 | J | mg/L | | 5 | 20 |
| Iron | 0.87 | | 0.883 | | mg/L | | 1 | 20 |
| Lead | <0.0075 | | <0.0075 | | mg/L | | NC | 20 |
| Manganese | 0.027 | | 0.0261 | | mg/L | | 4 | 20 |
| Nickel | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Selenium | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Silver | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Vanadium | <0.025 | | <0.025 | | mg/L | | NC | 20 |
| Zinc | 0.046 | J | 0.0487 | J | mg/L | | 5 | 20 |

Lab Sample ID: LB 500-408822/1-B
Matrix: Solid
Analysis Batch: 409155

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408973

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/08/17 09:26 | 11/08/17 18:30 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-408829/1-B
Matrix: Solid
Analysis Batch: 409318

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 409049

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/08/17 14:37 | 11/09/17 20:24 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/08/17 14:37 | 11/09/17 20:24 | 1 |

Lab Sample ID: LB 500-408832/1-C
Matrix: Solid
Analysis Batch: 409604

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 409447

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 14:43 | 11/11/17 18:24 | 1 |

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-408963/2-A
Matrix: Solid
Analysis Batch: 409646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408963
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.508 | | mg/L | | 102 | 80 - 120 |
| Thallium | 0.100 | 0.108 | | mg/L | | 108 | 80 - 120 |

Lab Sample ID: LCS 500-408973/2-A
Matrix: Solid
Analysis Batch: 409365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408973
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.496 | | mg/L | | 99 | 80 - 120 |
| Thallium | 0.100 | 0.109 | | mg/L | | 109 | 80 - 120 |

Lab Sample ID: LB 500-408821/1-B
Matrix: Solid
Analysis Batch: 409646

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408963

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 08:50 | 11/10/17 10:23 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 08:50 | 11/10/17 10:23 | 1 |

Lab Sample ID: 500-136756-20 MS
Matrix: Solid
Analysis Batch: 409365

Client Sample ID: 3160-21-5 (0-2.5')
Prep Type: TCLP
Prep Batch: 408963
%Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Antimony | <0.0060 | | 0.500 | 0.486 | | mg/L | | 97 | 50 - 150 |
| Thallium | <0.0020 | | 0.100 | 0.111 | | mg/L | | 111 | 50 - 150 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-136756-20 DU
Matrix: Solid
Analysis Batch: 409365

Client Sample ID: 3160-21-5 (0-2.5')
Prep Type: TCLP
Prep Batch: 408963

| Analyte | Sample | Sample | DU | | Unit | D | RPD | Limit |
|----------|---------|-----------|---------|-----------|------|---|-----|-------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Antimony | <0.0060 | | <0.0060 | | mg/L | | NC | 20 |
| Thallium | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |

Lab Sample ID: LB 500-408822/1-B
Matrix: Solid
Analysis Batch: 409365

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 408973

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/08/17 09:26 | 11/09/17 16:18 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/08/17 09:26 | 11/09/17 16:18 | 1 |

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-409004/12-A
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409004

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:15 | 1 |

Lab Sample ID: LCS 500-409004/13-A
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409004

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |

Lab Sample ID: MB 500-409005/12-A
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409005

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:37 | 1 |

Lab Sample ID: LCS 500-409005/13-A
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409005

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| | | | | | | | |

Lab Sample ID: LB 500-408821/1-C
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 409004

| Analyte | LB | LB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 09:18 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-136756-3 MS
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: 3160-51-1 (0-1.5')
Prep Type: TCLP
Prep Batch: 409004

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Mercury | <0.00020 | | 0.00100 | 0.00105 | | mg/L | | 105 | 50 - 150 |

Lab Sample ID: 500-136756-3 DU
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: 3160-51-1 (0-1.5')
Prep Type: TCLP
Prep Batch: 409004

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Mercury | <0.00020 | | <0.00020 | | mg/L | | NC | 20 |

Lab Sample ID: LB 500-408822/1-C
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 409005

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/08/17 13:40 | 11/09/17 07:40 | 1 |

Lab Sample ID: 500-136756-21 MS
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: 3160-21-4 (0-2.5')
Prep Type: TCLP
Prep Batch: 409005

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| Mercury | <0.00020 | | 0.00100 | 0.00114 | | mg/L | | 114 | 50 - 150 |

Lab Sample ID: 500-136756-21 DU
Matrix: Solid
Analysis Batch: 409195

Client Sample ID: 3160-21-4 (0-2.5')
Prep Type: TCLP
Prep Batch: 409005

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Mercury | <0.00020 | | <0.00020 | | mg/L | | NC | 20 |

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-408789/35-A
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408789

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/07/17 13:20 | 11/08/17 10:20 | 1 |

Lab Sample ID: LCS 500-408789/36-A
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408789

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.173 | | mg/Kg | | 103 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-136756-8 MS
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: 3160-36-7 (0-3')
Prep Type: Total/NA
Prep Batch: 408789

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Mercury | 0.011 | J | 0.0995 | 0.0896 | | mg/Kg | ☼ | 79 | 75 - 125 |

Lab Sample ID: 500-136756-8 MSD
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: 3160-36-7 (0-3')
Prep Type: Total/NA
Prep Batch: 408789

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Mercury | 0.011 | J | 0.0979 | 0.0947 | | mg/Kg | ☼ | 85 | 75 - 125 | 6 | 20 |

Lab Sample ID: 500-136756-8 DU
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: 3160-36-7 (0-3')
Prep Type: Total/NA
Prep Batch: 408789

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|-------|---|-----|-------|
| Mercury | 0.011 | J | 0.0129 | J | mg/Kg | ☼ | 14 | 20 |

Lab Sample ID: MB 500-408790/12-A
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408790

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/07/17 13:20 | 11/08/17 11:26 | 1 |

Lab Sample ID: LCS 500-408790/13-A
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408790

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.166 | | mg/Kg | | 99 | 80 - 120 |

Lab Sample ID: 500-136756-22 MS
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: 3160-21-3 (0-2.5')
Prep Type: Total/NA
Prep Batch: 408790

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Mercury | 0.037 | | 0.0900 | 0.109 | | mg/Kg | ☼ | 80 | 75 - 125 |

Lab Sample ID: 500-136756-22 MSD
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: 3160-21-3 (0-2.5')
Prep Type: Total/NA
Prep Batch: 408790

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Mercury | 0.037 | | 0.0897 | 0.104 | | mg/Kg | ☼ | 75 | 75 - 125 | 5 | 20 |

Lab Sample ID: 500-136756-22 DU
Matrix: Solid
Analysis Batch: 409010

Client Sample ID: 3160-21-3 (0-2.5')
Prep Type: Total/NA
Prep Batch: 408790

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|---------|---------------|------------------|-----------|--------------|-------|---|-----|-------|
| Mercury | 0.037 | | 0.0330 | | mg/Kg | ☼ | 12 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Method: 9045D - pH

Lab Sample ID: 500-136756-8 DU
Matrix: Solid
Analysis Batch: 409641

Client Sample ID: 3160-36-7 (0-3')
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 4.8 | | 4.78 | | SU | | 0.2 | |

Lab Sample ID: 500-136756-27 DU
Matrix: Solid
Analysis Batch: 409641

Client Sample ID: 3160-5-1 (0-1.2')
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 8.6 | | 8.58 | | SU | | 0.4 | |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

Date Collected: 11/02/17 08:05

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 16:40 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:32 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:19 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | (Start) | 11/12/17 16:06 | | |
| | | | | | (End) | 11/12/17 16:39 | | |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-51-3 (0-1.5')

Lab Sample ID: 500-136756-1

Date Collected: 11/02/17 08:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 12:26 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/10/17 20:42 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 19:15 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:25 | EEN | TAL CHI |

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 16:44 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:36 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 10:02 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/12/17 16:39 (Start) 11/12/17 17:13 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-51-2 (0-1.5')

Lab Sample ID: 500-136756-2

Date Collected: 11/02/17 08:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 12:51 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/10/17 22:32 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 19:43 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:27 | EEN | TAL CHI |

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

Date Collected: 11/02/17 08:25

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 20:32 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 16:49 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:40 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 10:03 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/12/17 17:13 (Start) 11/12/17 17:46 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-51-1 (0-1.5')

Lab Sample ID: 500-136756-3

Date Collected: 11/02/17 08:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 13:16 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/10/17 23:00 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 19:47 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:29 | EEN | TAL CHI |

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

Date Collected: 11/02/17 08:35

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 16:53 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:44 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:31 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 17:46 (End) 11/12/17 18:20 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-11 (0-3')

Lab Sample ID: 500-136756-4

Date Collected: 11/02/17 08:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 13:42 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/10/17 23:28 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 19:51 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:31 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

Date Collected: 11/02/17 08:45

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 16:57 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:48 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:33 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 18:20 (End) 11/12/17 18:53 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-10 (0-3')

Lab Sample ID: 500-136756-5

Date Collected: 11/02/17 08:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 14:07 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/10/17 23:56 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 19:55 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:34 | EEN | TAL CHI |

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 20:36 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:01 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:52 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:37 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/12/17 18:53 (Start) 11/12/17 19:27 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-9 (0-3')

Lab Sample ID: 500-136756-6

Date Collected: 11/02/17 08:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 11:22 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 00:23 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 19:59 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:36 | EEN | TAL CHI |

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

Date Collected: 11/02/17 09:05

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:05 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 10:56 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:39 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/12/17 19:27 (Start) 11/12/17 20:00 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-8 (0-3')

Lab Sample ID: 500-136756-7

Date Collected: 11/02/17 09:05

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 11:47 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 00:51 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 10 | 409164 | 11/08/17 20:10 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 20:03 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:43 | EEN | TAL CHI |

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 20:40 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:09 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 11:00 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:40 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 20:00 (End) 11/12/17 20:33 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 12:13 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/10/17 21:30 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 20:07 | PJ1 | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-7 (0-3')

Lab Sample ID: 500-136756-8

Date Collected: 11/02/17 09:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:45 | EEN | TAL CHI |

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

Date Collected: 11/02/17 09:30

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 20:44 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:21 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:17 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:42 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | (Start) | 11/12/17 21:07 | | |
| | | | | | (End) | 11/12/17 21:40 | | |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-6 (0-3')

Lab Sample ID: 500-136756-9

Date Collected: 11/02/17 09:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 12:38 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/10/17 21:54 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 20:11 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:54 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

Date Collected: 11/02/17 09:40

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 20:48 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:25 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:20 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:43 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | (Start) | 11/12/17 21:40 | | |
| | | | | | (End) | 11/12/17 22:14 | | |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-5 (0-3')

Lab Sample ID: 500-136756-10

Date Collected: 11/02/17 09:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 13:03 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/10/17 22:18 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408958 | 11/07/17 20:15 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:56 | EEN | TAL CHI |

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:29 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:24 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:44 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 22:14 (End) 11/12/17 22:47 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-4 (0-3')

Lab Sample ID: 500-136756-11

Date Collected: 11/02/17 10:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 13:28 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/10/17 23:32 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:14 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 10:59 | EEN | TAL CHI |

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

Date Collected: 11/02/17 10:20

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 21:00 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:33 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:27 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:46 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 22:47 (End) 11/12/17 23:20 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-3 (0-3')

Lab Sample ID: 500-136756-12

Date Collected: 11/02/17 10:20

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.7

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 13:54 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/10/17 23:56 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:26 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:01 | EEN | TAL CHI |

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

Date Collected: 11/02/17 10:30

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 408829 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409049 | 11/08/17 14:37 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409318 | 11/09/17 21:04 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:37 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:30 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:47 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 23:20 (End) 11/12/17 23:54 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-2 (0-3')

Lab Sample ID: 500-136756-13

Date Collected: 11/02/17 10:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.5

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 14:18 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/11/17 00:20 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:30 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:04 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

Date Collected: 11/02/17 10:40

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:41 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:34 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:49 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/12/17 23:54 (End) 11/13/17 00:27 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-36-1 (0-3')

Lab Sample ID: 500-136756-14

Date Collected: 11/02/17 10:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 76.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 14:43 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/11/17 00:45 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:34 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:11 | EEN | TAL CHI |

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:45 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:37 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:50 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/13/17 00:27 (Start) 11/13/17 01:01 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-21-10 (0-2.5')

Lab Sample ID: 500-136756-15

Date Collected: 11/02/17 11:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 15:08 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 01:19 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:38 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:13 | EEN | TAL CHI |

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

Date Collected: 11/02/17 11:10

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:49 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:41 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:55 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/13/17 01:01 (Start) 11/13/17 01:34 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-9 (0-2.5')

Lab Sample ID: 500-136756-16

Date Collected: 11/02/17 11:10

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 14:32 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 01:46 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:42 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:15 | EEN | TAL CHI |

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

Date Collected: 11/02/17 12:15

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:53 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:44 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:56 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | (Start) | 11/13/17 01:34 | | |
| | | | | | (End) | 11/13/17 02:08 | | |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-21-8 (0-2.5')

Lab Sample ID: 500-136756-17

Date Collected: 11/02/17 12:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 15:59 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/11/17 01:09 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:46 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:18 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

Date Collected: 11/02/17 12:25

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 17:57 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 15:48 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:58 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/13/17 02:08 (End) 11/13/17 02:41 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-21-7 (0-2.5')

Lab Sample ID: 500-136756-18

Date Collected: 11/02/17 12:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 16:23 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409487 | 11/11/17 02:14 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:50 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:20 | EEN | TAL CHI |

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 18:09 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:01 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 09:59 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/13/17 02:41 (Start) 11/13/17 03:14 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Client Sample ID: 3160-21-6 (0-2.5')

Lab Sample ID: 500-136756-19

Date Collected: 11/02/17 12:35

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 16:48 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/11/17 01:34 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:54 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:22 | EEN | TAL CHI |

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

Date Collected: 11/02/17 12:45

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 18:13 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408963 | 11/08/17 08:50 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:05 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408821 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409004 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 10:01 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/13/17 03:14 (Start) 11/13/17 03:48 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408681 | 11/06/17 17:14 | PFK | TAL CHI |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-5 (0-2.5')

Lab Sample ID: 500-136756-20

Date Collected: 11/02/17 12:45

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 78.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 17:13 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409340 | 11/10/17 07:22 | STW | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409400 | 11/11/17 01:58 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408751 | 11/07/17 08:10 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409164 | 11/08/17 20:57 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408789 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:24 | EEN | TAL CHI |

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

Date Collected: 11/02/17 12:55

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 408832 | 11/07/17 14:20 | SAH | TAL CHI |
| SPLP East | Prep | 3010A | | | 409447 | 11/10/17 14:43 | BDE | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 409604 | 11/11/17 18:28 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 18:38 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:25 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:41 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | (Start) 11/13/17 03:48 (End) 11/13/17 04:21 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

Client Sample ID: 3160-21-4 (0-2.5')

Lab Sample ID: 500-136756-21

Date Collected: 11/02/17 12:55

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 74.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 17:38 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409279 | 11/09/17 17:53 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409657 | 11/13/17 16:32 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 02:58 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:31 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

Date Collected: 11/02/17 13:15

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 18:42 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:29 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:46 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | (Start) | 11/13/17 04:21 | | |
| | | | | | (End) | 11/13/17 04:55 | | |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

Client Sample ID: 3160-21-3 (0-2.5')

Lab Sample ID: 500-136756-22

Date Collected: 11/02/17 13:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 84.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 18:03 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409279 | 11/09/17 17:53 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409355 | 11/10/17 16:10 | GES | TAL CHI |
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 03:26 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:38 | EEN | TAL CHI |

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 18:46 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:32 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:47 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/13/17 04:55 (Start) 11/13/17 05:28 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

Client Sample ID: 3160-21-2 (0-2.5')

Lab Sample ID: 500-136756-23

Date Collected: 11/02/17 13:25

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 82.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 18:29 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409279 | 11/09/17 17:53 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409355 | 11/10/17 19:40 | GES | TAL CHI |
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 03:30 | PJ1 | TAL CHI |
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 5 | 409318 | 11/09/17 18:01 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:50 | EEN | TAL CHI |

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

Date Collected: 11/02/17 13:40

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 18:58 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:43 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:49 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | 11/13/17 05:28 (Start) 11/13/17 06:02 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-21-1 (0-2.5')

Lab Sample ID: 500-136756-24

Date Collected: 11/02/17 13:40

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 80.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408500 | 11/03/17 18:20 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408744 | 11/07/17 18:53 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409279 | 11/09/17 17:53 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409657 | 11/13/17 16:59 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 03:34 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:53 | EEN | TAL CHI |

Client Sample ID: 3160-5-3 (0-1.2')

Lab Sample ID: 500-136756-25

Date Collected: 11/02/17 14:00

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 19:02 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:46 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:56 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | (Start) | 11/13/17 06:02 | | |
| | | | | | (End) | 11/13/17 06:35 | | |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

Client Sample ID: 3160-5-3 (0-1.2')

Lab Sample ID: 500-136756-25

Date Collected: 11/02/17 14:00

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 79.6

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 03:38 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:55 | EEN | TAL CHI |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-2 (0-1.2')

Lab Sample ID: 500-136756-26

Date Collected: 11/02/17 14:15

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|------------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 19:06 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:49 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:57 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | | (Start) 11/13/17 06:35 | | |
| | | | | | | (End) 11/13/17 07:08 | | |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

Client Sample ID: 3160-5-2 (0-1.2')

Lab Sample ID: 500-136756-26

Date Collected: 11/02/17 14:15

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 81.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 03:42 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 11:57 | EEN | TAL CHI |

Client Sample ID: 3160-5-1 (0-1.2')

Lab Sample ID: 500-136756-27

Date Collected: 11/02/17 14:30

Matrix: Solid

Date Received: 11/03/17 08:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|------------------------|---------|---------|
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409155 | 11/08/17 19:10 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 3010A | | | 408973 | 11/08/17 09:26 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409365 | 11/09/17 16:53 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 408822 | 11/07/17 14:20 | SAH | TAL CHI |
| TCLP | Prep | 7470A | | | 409005 | 11/08/17 13:40 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409195 | 11/09/17 07:59 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409641 | | SMO | TAL CHI |
| | | | | | | (Start) 11/13/17 07:08 | | |
| | | | | | | (End) 11/13/17 07:42 | | |
| Total/NA | Analysis | Moisture | | 1 | 408752 | 11/07/17 08:17 | PFK | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Client Sample ID: 3160-5-1 (0-1.2')

Lab Sample ID: 500-136756-27

Date Collected: 11/02/17 14:30

Matrix: Solid

Date Received: 11/03/17 08:50

Percent Solids: 85.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3050B | | | 408945 | 11/08/17 07:33 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 409165 | 11/09/17 03:46 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 408790 | 11/07/17 13:20 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409010 | 11/08/17 12:00 | EEN | TAL CHI |

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136756-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| Illinois | NELAP | 5 | 100201 | 04-30-18 |

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|----------------------------|
| 6020A | 3010A | Solid | Antimony |
| 6020A | 3010A | Solid | Thallium |
| 8260B | 5035 | Solid | 1,3-Dichloropropene, Total |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: FERRY DIXON
Company: AMECFW WOOD
Address: 4232 BRANDY WINE
Address: DRIVE A PEORIA, IL
Phone: 61614
Fax: 309-692-4422
E-Mail:

Bill To (optional)
Contact: SAMZ
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-136756

Chain of Custody Number: _____

Page 1 of 4

Temperature °C of Cooler: (1.1)(2.4)(2.6)(3.8)



500-136756 COC

| Client | | Client Project # | | Preservative | | Parameter | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | |
|------------------------|--------|--------------------|------|--------------|-----------------|-----------|------|--------|-----|--------------|-------------|-------------|----|----------|-----------|---------------|-----------|--------|--|--------|--|--------|--|
| AMECFW | | 3160150049 | | | | | | | | | | | | | | | | | | | | | |
| Project Name | | Lab Project # | | | | | | | | | | | | | | | | | | | | | |
| ID of W028 | | 50013898 | | | | | | | | | | | | | | | | | | | | | |
| Project Location/State | | Lab PM | | | | | | | | | | | | | | | | | | | | | |
| Benton, IL | | DICK WRIGHT | | | | | | | | | | | | | | | | | | | | | |
| Sampler | | Tom MANALLY | | | | | | | | | | | | | | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | Date | Time | # of Containers | Matrix | VOCs | SVOC | PCB | TOTAL METALS | TCLP METALS | SPLP METALS | PH | % Solids | PEAT/HEAD | Comments | | | | | | | |
| 1 | | 3160-51-3 (0-1.5') | 11/2 | 0825 | 6 | S | X | X | | X | X | X | X | X | | HOLD SPLP | | | | | | | |
| 2 | | 3160-51-2 (0-1.5') | 11/2 | 0815 | 6 | S | X | X | | X | X | X | X | X | | BASED ON TCLP | | | | | | | |
| 3 | | 3160-51-1 (0-1.5') | 11/2 | 0825 | 6 | S | X | X | | X | X | X | X | X | | RESULTS | | | | | | | |
| | | | | | | | | | | | | | | | | | SEE DIXON | | | | | | |
| | | | | | | | | | | | | | | | | | EMAIL RE: | | | | | | |
| | | | | | | | | | | | | | | | | | 18 METALS | | | | | | |
| | | | | | | | | | | | | | | | | | LID + | | | | | | |

Turnaround Time Required (Business Days)

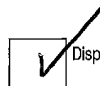
1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Requested Due Date

Rating

Sample Disposal

Return to Client



Disposal by Lab

Archive for _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|--------------------|-------------|---------|------|--------------------|---------|----------|------|
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| <u>[Signature]</u> | AMECFW WOOD | 11-2-17 | 1700 | <u>[Signature]</u> | TA | 11/03/17 | 0850 |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| | | | | | | | |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| | | | | | | | |

Lab Courier: _____
Shipped: _____
Hand Delivered: _____

Matrix Key
WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: TERRY DIXON
 Company: AMELFA WOOD
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: SAME
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-136756

Chain of Custody Number: _____

Page 2 of 4

Temperature °C of Cooler: _____

| Client | | Client Project # | | Preservative | | Parameter | | Sample Disposal | | Matrix | | Comments | | | | |
|------------------------|--------|-------------------|------|--------------|-----------------|-----------|-----|-----------------|-----|--------------|-------------|-------------|----|-----------|-----------|-------------------|
| Amelfw wood | | 3160150049 | | | | | | | | | | | | | | |
| Project Name | | Lab Project # | | | | | | | | | | | | | | |
| IDOT WO 23 | | 50013898 | | | | | | | | | | | | | | |
| Project Location/State | | Lab PM | | | | | | | | | | | | | | |
| Benton, IL | | DICK WRIGHT | | | | | | | | | | | | | | |
| Sampler | | Lab Project # | | | | | | | | | | | | | | |
| Tom Merrill | | 50013898 | | | | | | | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | Date | Time | # of Containers | Matrix | VOC | SVOC | PCB | TOTAL METALS | TRCP METALS | SPLP METALS | PH | 90 Solids | PEST/HERB | Comments |
| 4 | | 3160-36-11 (0-3') | 11/2 | 0835 | 6 | S | X | X | | X | X | X | X | X | | SEE pg 1 NOTES |
| 5 | | 3160-36-10 (0-3') | 11/2 | 0845 | 6 | S | X | X | | X | X | X | X | X | | |
| 6 | | 3160-36-9 (0-3') | 11/2 | 0855 | 6 | S | X | X | | X | X | X | X | X | | |
| 7 | | 3160-36-8 (0-3') | 11/2 | 0905 | 6 | S | X | X | | X | X | X | X | X | | |
| 8 | | 3160-36-7 (0-3') | 11/2 | 0920 | 6 | S | X | X | | X | X | X | X | X | | |
| 9 | | 3160-36-6 (0-3') | 11/2 | 0930 | 6 | S | X | X | | X | X | X | X | X | | |
| 10 | | 3160-36-5 (0-3') | 11/2 | 0940 | 6 | S | X | X | | X | X | X | X | X | | |
| 11 | | 3160-36-4 (0-3') | 11/2 | 10:10 | 6 | S | X | X | | X | X | X | X | X | | |
| 12 | | 3160-36-3 (0-3') | 11/2 | 10:20 | 6 | S | X | X | | X | X | X | X | X | | |
| 13 | | 3160-36-2 (0-3') | 11/2 | 10:30 | 6 | S | X | X | | X | X | X | X | X | | |
| 14 | | 3160-36-1 (0-3') | 11/2 | 10:40 | 6 | S | X | X | | X | X | X | X | X | | |

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|---------------------------------------|-------------------|-----------------|---------------|-----------------------------------|---------------|------------------|--------------|
| Relinquished By <u>[Signature]</u> | Company Amelfw | Date 11-2-17 | Time 17:00 | Received By <u>[Signature]</u> | Company TA | Date 11/03/17 | Time 0850 |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |

Lab Courier: _____
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: TERRY DIXON
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: JANE
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-136756
 Chain of Custody Number: _____
 Page 3 of 4
 Temperature °C of Cooler: _____

| Client | | Client Project # | | Preservative | | Parameter | | | | | | | | | | Preservative Key | |
|------------------------|--------|----------------------------|--|--------------|--------------|-----------------|----------|-----------------|----------|--------|--|----------|----------|----------|----------|---|-----------------|
| <u>AMEC-fw WOOD</u> | | <u>3160150049</u> | | | | | | | | | | | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | |
| Project Name | | Lab Project # | | Sampling | | Matrix | | | | | | | | | | Comments | |
| <u>IOBT NO 28</u> | | <u>50013898</u> | | | | | | | | | | | | | | | |
| Project Location/State | | Lab Project # | | Date | | Time | | # of Containers | | Matrix | | | | | | | |
| <u>BENTON, IL</u> | | <u>50013898</u> | | | | | | | | | | | | | | | |
| Sampler | | Lab PM | | | | | | | | | | | | | | | |
| <u>Tom McNally</u> | | <u>DICK WRIGHT</u> | | | | | | | | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | | Date | Time | # of Containers | Matrix | | | | | | | | | | |
| 15 | | <u>3160-21-10 (0-2.5')</u> | | <u>11/2</u> | <u>11:00</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | <u>SEE pg 1</u> |
| 16 | | <u>3160-21-9 (0-2.5')</u> | | <u>11/2</u> | <u>11:10</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | <u>NOT EJ</u> |
| 17 | | <u>3160-21-8 (0-2.5')</u> | | <u>11/2</u> | <u>12:15</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 18 | | <u>3160-21-7 (0-2.5')</u> | | <u>11/2</u> | <u>12:25</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 19 | | <u>3160-21-6 (0-2.5')</u> | | <u>11/2</u> | <u>12:35</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 20 | | <u>3160-21-5 (0-2.5')</u> | | <u>11/2</u> | <u>12:45</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 21 | | <u>3160-21-4 (0-2.5')</u> | | <u>11/2</u> | <u>12:55</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 22 | | <u>3160-21-3 (0-2.5')</u> | | <u>11/2</u> | <u>13:15</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 23 | | <u>3160-21-2 (0-2.5')</u> | | <u>11/2</u> | <u>13:25</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| 24 | | <u>3160-21-1 (0-2.5')</u> | | <u>11/2</u> | <u>13:40</u> | <u>6</u> | <u>S</u> | <u>X</u> | <u>X</u> | | | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ROUTINE Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | |
|---|--|-----------------------|
| Relinquished By <u>[Signature]</u> Company: <u>AMEC-fw WOOD</u> Date: <u>11-2-17</u> Time: <u>1700</u> | Received By <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/03/17</u> Time: <u>0850</u> | Lab Courier: _____ |
| Relinquished By Company: _____ Date: _____ Time: _____ | Received By Company: _____ Date: _____ Time: _____ | Shipped: _____ |
| Relinquished By Company: _____ Date: _____ Time: _____ | Received By Company: _____ Date: _____ Time: _____ | Hand Delivered: _____ |

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: TERRY DIXON
 Company: AMECFW-WOOD
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: JAME
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-136756
 Chain of Custody Number: _____
 Page 4 of 4
 Temperature °C of Cooler: _____

| Client | | Client Project # | | Preservative | | NOCS | SVOCs | PCB | TOTAL METALS | TELEP METALS | SPLP METALS | PH | % Solids | PEST / HERB | Comments |
|------------------------|--------|-------------------|----------|--------------|-----------------|--------|-------|-----|--------------|--------------|-------------|----|----------|-------------|----------|
| Project Name | | Lab Project # | | Parameter | | | | | | | | | | | |
| Project Location/State | | Lab PM | | | | | | | | | | | | | |
| Sampler | | | | | | | | | | | | | | | |
| Lab ID | MS/MSD | Sample ID | Sampling | | # of Containers | Matrix | | | | | | | | | |
| | | | Date | Time | | | | | | | | | | | |
| 25 | | 3160-5-3 (0-1.2') | 11/2 | 1400 | 1 | S | | | | | | | | | |
| 26 | | 3160-5-2 (0-1.2') | 11/2 | 1415 | 1 | S | | | | | | | | | |
| 27 | | 3160-5-1 (0-1.2') | 11/2 | 1430 | 1 | S | | | | | | | | | |

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days Routine Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|---------------------------------------|-------------------------------|------------------------|---------------------|-----------------------------------|----------------------|-------------------------|---------------------|
| Relinquished By <u>[Signature]</u> | Company <u>AMECFW WOOD</u> | Date <u>11/2/17</u> | Time <u>1700</u> | Received By <u>[Signature]</u> | Company <u>TA</u> | Date <u>11/03/17</u> | Time <u>0850</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |

Lab Courier _____
 Shipped _____
 Hand Delivered _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-136756-1

Login Number: 136756

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

| Question | Answer | Comment |
|--|--------|-----------------------|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | (1.1)(2.4)(2.6)(3.8)c |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-136798-1
Client Project/Site: IDOT - Benton - WO 028

For:
AMEC Foster Wheeler E & I, Inc
4232 Brandywine Drive
Suite A
Peoria, Illinois 61614

Attn: Mr. Terry Dixon



Authorized for release by:
11/16/2017 8:39:31 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Job ID: 500-136798-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-136798-1**

Receipt

The samples were received on 11/4/2017 11:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-2 (0-3)

Lab Sample ID: 500-136798-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Anthracene | 0.012 | J | 0.039 | 0.0066 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.020 | J | 0.039 | 0.0053 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.052 | | 0.039 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.055 | | 0.039 | 0.0086 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.041 | | 0.039 | 0.013 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.019 | J | 0.039 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.050 | | 0.039 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.037 | J | 0.039 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.015 | J | 0.080 | 0.0073 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Naphthalene | 0.0069 | J | 0.039 | 0.0061 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.044 | | 0.039 | 0.0055 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.082 | | 0.039 | 0.0079 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.77 | J F1 F2 | 1.2 | 0.23 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 8.1 | | 0.59 | 0.20 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 100 | | 0.59 | 0.067 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.55 | | 0.24 | 0.055 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.18 | | 0.12 | 0.021 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.59 | 0.29 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 13 | | 0.29 | 0.077 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 17 | B F1 | 0.59 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 12 | 6.1 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 54 | | 0.29 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 720 | | 0.59 | 0.085 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 11 | | 0.59 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.97 | F1 | 0.59 | 0.35 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 26 | | 0.29 | 0.069 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 54 | F1 | 1.2 | 0.52 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.72 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.021 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.10 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.062 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.033 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.3 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-------|--------|-------|---------|---|--------|-----------|
| Acetone | 0.020 | | 0.019 | 0.0084 | mg/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthylene | 0.0055 | J | 0.038 | 0.0051 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Anthracene | 0.016 | J | 0.038 | 0.0064 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 0.052 | | 0.038 | 0.0052 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 0.075 | | 0.038 | 0.0075 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 0.084 | | 0.038 | 0.0083 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 0.051 | | 0.038 | 0.012 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 0.019 | J | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Chrysene | 0.052 | | 0.038 | 0.011 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Dibenzofuran | 0.047 | J | 0.19 | 0.045 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Fluoranthene | 0.075 | | 0.038 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.044 | | 0.038 | 0.010 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| 2-Methylnaphthalene | 0.12 | | 0.078 | 0.0071 | mg/Kg | 1 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-1 (0-3) (Continued)

Lab Sample ID: 500-136798-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|--------|--------|-------|---------|---|--------|-----------|
| Naphthalene | 0.053 | | 0.038 | 0.0059 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Phenanthrene | 0.15 | | 0.038 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Pyrene | 0.070 | | 0.038 | 0.0077 | mg/Kg | 1 | ☼ | 8270D | Total/NA |
| Antimony | 0.21 | J | 1.1 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Arsenic | 7.9 | | 0.54 | 0.19 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 91 | | 0.54 | 0.062 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Beryllium | 0.53 | | 0.22 | 0.051 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cadmium | 0.53 | | 0.11 | 0.020 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 14 | | 0.54 | 0.27 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Cobalt | 8.3 | | 0.27 | 0.071 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Copper | 13 | B | 0.54 | 0.15 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Iron | 15000 | | 11 | 5.6 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 82 | | 0.27 | 0.13 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Manganese | 440 | | 0.54 | 0.079 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Nickel | 14 | | 0.54 | 0.16 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Selenium | 0.47 | J | 0.54 | 0.32 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Vanadium | 22 | | 0.27 | 0.064 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Zinc | 71 | | 1.1 | 0.48 | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 0.86 | | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP |
| Cadmium | 0.0041 | J | 0.0050 | 0.0020 | mg/L | 1 | | 6010B | TCLP |
| Copper | 0.017 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Iron | 0.20 | J | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP |
| Manganese | 0.029 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP |
| Zinc | 0.061 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP |
| Mercury | 0.045 | | 0.019 | 0.0063 | mg/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 8.5 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 500-136798-1 | 3160-8-2 (0-3) | Solid | 11/03/17 08:00 | 11/04/17 11:05 |
| 500-136798-2 | 3160-8-1 (0-3) | Solid | 11/03/17 08:10 | 11/04/17 11:05 |

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Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-2 (0-3)

Lab Sample ID: 500-136798-1

Date Collected: 11/03/17 08:00

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.017 | | 0.017 | 0.0075 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Benzene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Bromodichloromethane | <0.0017 | | 0.0017 | 0.00035 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Bromoform | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Bromomethane | <0.0043 | | 0.0043 | 0.0016 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 2-Butanone (MEK) | <0.0043 | | 0.0043 | 0.0019 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Carbon disulfide | <0.0043 | | 0.0043 | 0.00090 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Carbon tetrachloride | <0.0017 | | 0.0017 | 0.00050 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Chlorobenzene | <0.0017 | | 0.0017 | 0.00064 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Chloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Chloroform | <0.0017 | | 0.0017 | 0.00060 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Chloromethane | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| cis-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00048 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| cis-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Dibromochloromethane | <0.0017 | | 0.0017 | 0.00056 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,1-Dichloroethane | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,2-Dichloroethane | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,1-Dichloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,2-Dichloropropane | <0.0017 | | 0.0017 | 0.00045 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,3-Dichloropropene, Total | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Ethylbenzene | <0.0017 | | 0.0017 | 0.00083 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 2-Hexanone | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Methylene Chloride | <0.0043 | | 0.0043 | 0.0017 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0043 | | 0.0043 | 0.0013 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Methyl tert-butyl ether | <0.0017 | | 0.0017 | 0.00051 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Styrene | <0.0017 | | 0.0017 | 0.00052 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0017 | | 0.0017 | 0.00055 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Tetrachloroethene | <0.0017 | | 0.0017 | 0.00059 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Toluene | <0.0017 | | 0.0017 | 0.00044 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| trans-1,2-Dichloroethene | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| trans-1,3-Dichloropropene | <0.0017 | | 0.0017 | 0.00061 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,1,1-Trichloroethane | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,1,2-Trichloroethane | <0.0017 | | 0.0017 | 0.00074 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Trichloroethene | <0.0017 | | 0.0017 | 0.00058 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Vinyl acetate | <0.0043 | | 0.0043 | 0.0015 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Vinyl chloride | <0.0017 | | 0.0017 | 0.00076 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Xylenes, Total | <0.0035 | | 0.0035 | 0.00055 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 11:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 86 | | 75 - 131 | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Dibromofluoromethane | 104 | | 75 - 126 | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 107 | | 70 - 134 | 11/04/17 15:18 | 11/08/17 11:35 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | 11/04/17 15:18 | 11/08/17 11:35 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.039 | | 0.039 | 0.0071 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Acenaphthylene | <0.039 | | 0.039 | 0.0052 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Anthracene | 0.012 | J | 0.039 | 0.0066 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Benzo[a]anthracene | 0.020 | J | 0.039 | 0.0053 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-2 (0-3)

Lab Sample ID: 500-136798-1

Date Collected: 11/03/17 08:00

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.052 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Benzo[b]fluoranthene | 0.055 | | 0.039 | 0.0086 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Benzo[g,h,i]perylene | 0.041 | | 0.039 | 0.013 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Benzo[k]fluoranthene | <0.039 | | 0.039 | 0.012 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.099 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 4-Chloroaniline | <0.80 | | 0.80 | 0.19 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 4-Chloro-3-methylphenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Chrysene | 0.019 | J | 0.039 | 0.011 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Dibenz(a,h)anthracene | <0.039 | | 0.039 | 0.0077 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 1,2-Dichlorobenzene | <0.20 | | 0.20 | 0.048 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 1,3-Dichlorobenzene | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 1,4-Dichlorobenzene | <0.20 | | 0.20 | 0.051 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | | 0.20 | 0.056 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4-Dichlorophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4-Dimethylphenol | <0.39 | | 0.39 | 0.15 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.052 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.80 | | 0.80 | 0.32 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4-Dinitrophenol | <0.80 | | 0.80 | 0.70 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.078 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Fluoranthene | 0.050 | | 0.039 | 0.0074 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Fluorene | <0.039 | | 0.039 | 0.0056 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Hexachlorobenzene | <0.080 | | 0.080 | 0.0092 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.062 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Hexachlorocyclopentadiene | <0.80 | | 0.80 | 0.23 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Hexachloroethane | <0.20 | | 0.20 | 0.060 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.037 | J | 0.039 | 0.010 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Methylnaphthalene | 0.015 | J | 0.080 | 0.0073 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Naphthalene | 0.0069 | J | 0.039 | 0.0061 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 3-Nitroaniline | <0.39 | | 0.39 | 0.12 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 4-Nitroaniline | <0.39 | | 0.39 | 0.17 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Nitrobenzene | <0.039 | | 0.039 | 0.0099 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Nitrophenol | <0.39 | | 0.39 | 0.094 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-2 (0-3)

Lab Sample ID: 500-136798-1

Date Collected: 11/03/17 08:00

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.80 | | 0.80 | 0.38 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| N-Nitrosodi-n-propylamine | <0.080 | | 0.080 | 0.049 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | | 0.20 | 0.046 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Pentachlorophenol | <0.80 | | 0.80 | 0.64 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Phenanthrene | 0.044 | | 0.039 | 0.0055 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Phenol | <0.20 | | 0.20 | 0.088 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Pyrene | 0.082 | | 0.039 | 0.0079 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4,5-Trichlorophenol | <0.39 | | 0.39 | 0.091 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4,6-Trichlorophenol | <0.39 | | 0.39 | 0.14 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:04 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 87 | | 44 - 121 | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2-Fluorophenol | 107 | | 46 - 133 | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Nitrobenzene-d5 | 91 | | 41 - 120 | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Phenol-d5 | 109 | | 46 - 125 | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| Terphenyl-d14 | 113 | | 35 - 160 | 11/12/17 02:23 | 11/14/17 17:04 | 1 |
| 2,4,6-Tribromophenol | 75 | | 25 - 139 | 11/12/17 02:23 | 11/14/17 17:04 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|----------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.77 | J F1 F2 | 1.2 | 0.23 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Arsenic | 8.1 | | 0.59 | 0.20 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Barium | 100 | | 0.59 | 0.067 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Beryllium | 0.55 | | 0.24 | 0.055 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Cadmium | 0.18 | | 0.12 | 0.021 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Chromium | 14 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Cobalt | 13 | | 0.29 | 0.077 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Copper | 17 | B F1 | 0.59 | 0.16 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Iron | 15000 | | 12 | 6.1 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Lead | 54 | | 0.29 | 0.14 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Manganese | 720 | | 0.59 | 0.085 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Nickel | 11 | | 0.59 | 0.17 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Selenium | 0.97 | F1 | 0.59 | 0.35 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Silver | <0.29 | | 0.29 | 0.076 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Thallium | <0.59 | | 0.59 | 0.29 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Vanadium | 26 | | 0.29 | 0.069 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |
| Zinc | 54 | F1 | 1.2 | 0.52 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:10 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Barium | 0.72 | | 0.50 | 0.050 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Copper | 0.021 | J | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-2 (0-3)

Lab Sample ID: 500-136798-1

Date Collected: 11/03/17 08:00

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Manganese | 0.10 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |
| Zinc | 0.062 J | | 0.50 | 0.020 | mg/L | | 11/10/17 08:30 | 11/10/17 15:52 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/10/17 08:30 | 11/10/17 16:11 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/10/17 08:30 | 11/10/17 16:11 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/10/17 15:00 | 11/13/17 09:33 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.033 | | 0.019 | 0.0063 | mg/Kg | ✱ | 11/08/17 16:15 | 11/09/17 10:14 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.3 | | 0.20 | 0.20 | SU | | | 11/14/17 17:36 | 1 |

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

Date Collected: 11/03/17 08:10

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 83.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | 0.020 | | 0.019 | 0.0084 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Benzene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Bromodichloromethane | <0.0019 | | 0.0019 | 0.00039 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Bromoform | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Bromomethane | <0.0048 | | 0.0048 | 0.0018 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 2-Butanone (MEK) | <0.0048 | | 0.0048 | 0.0021 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Carbon disulfide | <0.0048 | | 0.0048 | 0.0010 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Carbon tetrachloride | <0.0019 | | 0.0019 | 0.00056 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Chlorobenzene | <0.0019 | | 0.0019 | 0.00071 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Chloroethane | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Chloroform | <0.0019 | | 0.0019 | 0.00067 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Chloromethane | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| cis-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00054 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| cis-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Dibromochloromethane | <0.0019 | | 0.0019 | 0.00063 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,1-Dichloroethane | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,2-Dichloroethane | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,1-Dichloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,2-Dichloropropane | <0.0019 | | 0.0019 | 0.00050 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,3-Dichloropropane, Total | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Ethylbenzene | <0.0019 | | 0.0019 | 0.00092 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 2-Hexanone | <0.0048 | | 0.0048 | 0.0015 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Methylene Chloride | <0.0048 | | 0.0048 | 0.0019 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0048 | | 0.0048 | 0.0014 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Methyl tert-butyl ether | <0.0019 | | 0.0019 | 0.00057 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Styrene | <0.0019 | | 0.0019 | 0.00058 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0019 | | 0.0019 | 0.00062 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Tetrachloroethene | <0.0019 | | 0.0019 | 0.00066 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Toluene | <0.0019 | | 0.0019 | 0.00049 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| trans-1,2-Dichloroethene | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| trans-1,3-Dichloropropene | <0.0019 | | 0.0019 | 0.00068 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,1,1-Trichloroethane | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,1,2-Trichloroethane | <0.0019 | | 0.0019 | 0.00083 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Trichloroethene | <0.0019 | | 0.0019 | 0.00065 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Vinyl acetate | <0.0048 | | 0.0048 | 0.0017 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Vinyl chloride | <0.0019 | | 0.0019 | 0.00085 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Xylenes, Total | <0.0039 | | 0.0039 | 0.00062 | mg/Kg | ☼ | 11/04/17 15:18 | 11/08/17 12:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Dibromofluoromethane | 108 | | 75 - 126 | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 70 - 134 | 11/04/17 15:18 | 11/08/17 12:00 | 1 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 | 11/04/17 15:18 | 11/08/17 12:00 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.038 | | 0.038 | 0.0069 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Acenaphthylene | 0.0055 | J | 0.038 | 0.0051 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Anthracene | 0.016 | J | 0.038 | 0.0064 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Benzo[a]anthracene | 0.052 | | 0.038 | 0.0052 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

Date Collected: 11/03/17 08:10

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 83.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | 0.075 | | 0.038 | 0.0075 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Benzo[b]fluoranthene | 0.084 | | 0.038 | 0.0083 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Benzo[g,h,i]perylene | 0.051 | | 0.038 | 0.012 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Benzo[k]fluoranthene | 0.019 | J | 0.038 | 0.011 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Bis(2-chloroethoxy)methane | <0.19 | | 0.19 | 0.039 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Bis(2-chloroethyl)ether | <0.19 | | 0.19 | 0.058 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.19 | | 0.19 | 0.070 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 4-Bromophenyl phenyl ether | <0.19 | | 0.19 | 0.051 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Butyl benzyl phthalate | <0.19 | | 0.19 | 0.073 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Carbazole | <0.19 | | 0.19 | 0.096 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 4-Chloroaniline | <0.78 | | 0.78 | 0.18 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 4-Chloro-3-methylphenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Chloronaphthalene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Chlorophenol | <0.19 | | 0.19 | 0.066 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 4-Chlorophenyl phenyl ether | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Chrysene | 0.052 | | 0.038 | 0.011 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Dibenz(a,h)anthracene | <0.038 | | 0.038 | 0.0074 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Dibenzofuran | 0.047 | J | 0.19 | 0.045 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 1,2-Dichlorobenzene | <0.19 | | 0.19 | 0.046 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 1,3-Dichlorobenzene | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 1,4-Dichlorobenzene | <0.19 | | 0.19 | 0.049 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 3,3'-Dichlorobenzidine | <0.19 | | 0.19 | 0.054 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4-Dichlorophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Diethyl phthalate | <0.19 | | 0.19 | 0.065 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4-Dimethylphenol | <0.38 | | 0.38 | 0.15 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Dimethyl phthalate | <0.19 | | 0.19 | 0.050 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Di-n-butyl phthalate | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.78 | | 0.78 | 0.31 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4-Dinitrophenol | <0.78 | | 0.78 | 0.68 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4-Dinitrotoluene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,6-Dinitrotoluene | <0.19 | | 0.19 | 0.076 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Di-n-octyl phthalate | <0.19 | | 0.19 | 0.063 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Fluoranthene | 0.075 | | 0.038 | 0.0071 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Fluorene | <0.038 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Hexachlorobenzene | <0.078 | | 0.078 | 0.0089 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Hexachlorobutadiene | <0.19 | | 0.19 | 0.061 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Hexachlorocyclopentadiene | <0.78 | | 0.78 | 0.22 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Hexachloroethane | <0.19 | | 0.19 | 0.059 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.044 | | 0.038 | 0.010 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Isophorone | <0.19 | | 0.19 | 0.043 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Methylnaphthalene | 0.12 | | 0.078 | 0.0071 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Methylphenol | <0.19 | | 0.19 | 0.062 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 3 & 4 Methylphenol | <0.19 | | 0.19 | 0.064 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Naphthalene | 0.053 | | 0.038 | 0.0059 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Nitroaniline | <0.19 | | 0.19 | 0.052 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 3-Nitroaniline | <0.38 | | 0.38 | 0.12 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 4-Nitroaniline | <0.38 | | 0.38 | 0.16 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Nitrobenzene | <0.038 | | 0.038 | 0.0096 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Nitrophenol | <0.38 | | 0.38 | 0.091 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

Date Collected: 11/03/17 08:10

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 83.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.78 | | 0.78 | 0.37 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| N-Nitrosodi-n-propylamine | <0.078 | | 0.078 | 0.047 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| N-Nitrosodiphenylamine | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.19 | | 0.19 | 0.045 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Pentachlorophenol | <0.78 | | 0.78 | 0.62 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Phenanthrene | 0.15 | | 0.038 | 0.0054 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Phenol | <0.19 | | 0.19 | 0.086 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Pyrene | 0.070 | | 0.038 | 0.0077 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 1,2,4-Trichlorobenzene | <0.19 | | 0.19 | 0.042 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4,5-Trichlorophenol | <0.38 | | 0.38 | 0.088 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4,6-Trichlorophenol | <0.38 | | 0.38 | 0.13 | mg/Kg | ☼ | 11/12/17 02:23 | 11/14/17 17:31 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 89 | | 44 - 121 | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2-Fluorophenol | 109 | | 46 - 133 | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Nitrobenzene-d5 | 92 | | 41 - 120 | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Phenol-d5 | 119 | | 46 - 125 | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| Terphenyl-d14 | 109 | | 35 - 160 | 11/12/17 02:23 | 11/14/17 17:31 | 1 |
| 2,4,6-Tribromophenol | 81 | | 25 - 139 | 11/12/17 02:23 | 11/14/17 17:31 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | 0.21 | J | 1.1 | 0.21 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Arsenic | 7.9 | | 0.54 | 0.19 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Barium | 91 | | 0.54 | 0.062 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Beryllium | 0.53 | | 0.22 | 0.051 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Cadmium | 0.53 | | 0.11 | 0.020 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Chromium | 14 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Cobalt | 8.3 | | 0.27 | 0.071 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Copper | 13 | B | 0.54 | 0.15 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Iron | 15000 | | 11 | 5.6 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Lead | 82 | | 0.27 | 0.13 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Manganese | 440 | | 0.54 | 0.079 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Nickel | 14 | | 0.54 | 0.16 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Selenium | 0.47 | J | 0.54 | 0.32 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Silver | <0.27 | | 0.27 | 0.070 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Thallium | <0.54 | | 0.54 | 0.27 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Vanadium | 22 | | 0.27 | 0.064 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |
| Zinc | 71 | | 1.1 | 0.48 | mg/Kg | ☼ | 11/07/17 08:36 | 11/07/17 15:37 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Barium | 0.86 | | 0.50 | 0.050 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Cadmium | 0.0041 | J | 0.0050 | 0.0020 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Copper | 0.017 | J | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Iron | 0.20 | J | 0.40 | 0.20 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

Date Collected: 11/03/17 08:10

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 83.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|----------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Manganese | 0.029 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |
| Zinc | 0.061 J | | 0.50 | 0.020 | mg/L | | 11/10/17 08:30 | 11/10/17 15:56 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/10/17 08:30 | 11/10/17 16:15 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/10/17 08:30 | 11/10/17 16:15 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/10/17 15:00 | 11/13/17 09:55 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.045 | | 0.019 | 0.0063 | mg/Kg | ✱ | 11/08/17 16:15 | 11/09/17 10:16 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 8.5 | | 0.20 | 0.20 | SU | | | 11/14/17 17:36 | 1 |

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Qualifiers

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Metals

| Qualifier | Qualifier Description |
|-----------|--|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| B | Compound was found in the blank and sample. |
| F3 | Duplicate RPD exceeds the control limit |
| F5 | Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| F4 | MS/MSD RPD exceeds control limits due to sample size difference. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

GC/MS VOA

Prep Batch: 408715

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 5035 | |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 5035 | |

Analysis Batch: 408942

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 8260B | 408715 |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 8260B | 408715 |
| MB 500-408942/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-408942/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCS 500-408942/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

GC/MS Semi VOA

Prep Batch: 409543

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 3541 | |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 3541 | |
| MB 500-409543/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-409543/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Analysis Batch: 409648

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 500-409543/1-A | Method Blank | Total/NA | Solid | 8270D | 409543 |
| LCS 500-409543/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 409543 |

Analysis Batch: 409849

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 8270D | 409543 |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 8270D | 409543 |

Metals

Prep Batch: 408756

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 3050B | |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 3050B | |
| MB 500-408756/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-408756/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-136798-1 MS | 3160-8-2 (0-3) | Total/NA | Solid | 3050B | |
| 500-136798-1 MSD | 3160-8-2 (0-3) | Total/NA | Solid | 3050B | |
| 500-136798-1 DU | 3160-8-2 (0-3) | Total/NA | Solid | 3050B | |

Analysis Batch: 408957

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 6010B | 408756 |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 6010B | 408756 |
| MB 500-408756/1-A | Method Blank | Total/NA | Solid | 6010B | 408756 |
| LCS 500-408756/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 408756 |
| 500-136798-1 MS | 3160-8-2 (0-3) | Total/NA | Solid | 6010B | 408756 |
| 500-136798-1 MSD | 3160-8-2 (0-3) | Total/NA | Solid | 6010B | 408756 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Metals (Continued)

Analysis Batch: 408957 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| 500-136798-1 DU | 3160-8-2 (0-3) | Total/NA | Solid | 6010B | 408756 |

Prep Batch: 409061

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 7471B | |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 7471B | |
| MB 500-409061/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-409061/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |

Analysis Batch: 409233

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 7471B | 409061 |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 7471B | 409061 |
| MB 500-409061/12-A | Method Blank | Total/NA | Solid | 7471B | 409061 |
| LCS 500-409061/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 409061 |

Leach Batch: 409249

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | TCLP | Solid | 1311 | |
| 500-136798-2 | 3160-8-1 (0-3) | TCLP | Solid | 1311 | |
| LB 500-409249/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 500-409249/1-E | Method Blank | TCLP | Solid | 1311 | |

Prep Batch: 409364

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | TCLP | Solid | 3010A | 409249 |
| 500-136798-2 | 3160-8-1 (0-3) | TCLP | Solid | 3010A | 409249 |
| LB 500-409249/1-B | Method Blank | TCLP | Solid | 3010A | 409249 |
| LCS 500-409364/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Prep Batch: 409460

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | TCLP | Solid | 7470A | 409249 |
| 500-136798-2 | 3160-8-1 (0-3) | TCLP | Solid | 7470A | 409249 |
| LB 500-409249/1-E | Method Blank | TCLP | Solid | 7470A | 409249 |
| MB 500-409460/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-409460/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |

Analysis Batch: 409503

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | TCLP | Solid | 6010B | 409364 |
| 500-136798-2 | 3160-8-1 (0-3) | TCLP | Solid | 6010B | 409364 |
| LB 500-409249/1-B | Method Blank | TCLP | Solid | 6010B | 409364 |
| LCS 500-409364/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 409364 |

Analysis Batch: 409646

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | TCLP | Solid | 6020A | 409364 |
| 500-136798-2 | 3160-8-1 (0-3) | TCLP | Solid | 6020A | 409364 |
| LB 500-409249/1-B | Method Blank | TCLP | Solid | 6020A | 409364 |
| LCS 500-409364/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 409364 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Analysis Batch: 409718

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | TCLP | Solid | 7470A | 409460 |
| 500-136798-2 | 3160-8-1 (0-3) | TCLP | Solid | 7470A | 409460 |
| LB 500-409249/1-E | Method Blank | TCLP | Solid | 7470A | 409460 |
| MB 500-409460/12-A | Method Blank | Total/NA | Solid | 7470A | 409460 |
| LCS 500-409460/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 409460 |

General Chemistry

Analysis Batch: 408654

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | Moisture | |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | Moisture | |

Analysis Batch: 409880

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-136798-1 | 3160-8-2 (0-3) | Total/NA | Solid | 9045D | |
| 500-136798-2 | 3160-8-1 (0-3) | Total/NA | Solid | 9045D | |

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | BFB | DBFM | 12DCE | TOL |
|-------------------|------------------------|----------|----------|----------|----------|
| | | (75-131) | (75-126) | (70-134) | (75-124) |
| 500-136798-1 | 3160-8-2 (0-3) | 86 | 104 | 107 | 96 |
| 500-136798-2 | 3160-8-1 (0-3) | 90 | 108 | 112 | 95 |
| LCS 500-408942/4 | Lab Control Sample | 85 | 100 | 104 | 97 |
| LCSD 500-408942/5 | Lab Control Sample Dup | 90 | 96 | 92 | 110 |
| MB 500-408942/7 | Method Blank | 88 | 100 | 100 | 96 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
 DBFM = Dibromofluoromethane
 12DCE = 1,2-Dichloroethane-d4 (Surr)
 TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | FBP | 2FP | NBZ | PHL | TPH | TBP |
|--------------------|--------------------|----------|----------|----------|----------|----------|----------|
| | | (44-121) | (46-133) | (41-120) | (46-125) | (35-160) | (25-139) |
| 500-136798-1 | 3160-8-2 (0-3) | 87 | 107 | 91 | 109 | 113 | 75 |
| 500-136798-2 | 3160-8-1 (0-3) | 89 | 109 | 92 | 119 | 109 | 81 |
| LCS 500-409543/2-A | Lab Control Sample | 88 | 86 | 90 | 89 | 83 | 77 |
| MB 500-409543/1-A | Method Blank | 83 | 93 | 92 | 83 | 78 | 57 |

Surrogate Legend

FBP = 2-Fluorobiphenyl
 2FP = 2-Fluorophenol
 NBZ = Nitrobenzene-d5
 PHL = Phenol-d5
 TPH = Terphenyl-d14
 TBP = 2,4,6-Tribromophenol

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-408942/7

Matrix: Solid

Analysis Batch: 408942

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/08/17 11:07 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/08/17 11:07 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/08/17 11:07 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/08/17 11:07 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/08/17 11:07 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/08/17 11:07 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/08/17 11:07 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88 | | 75 - 131 | | 11/08/17 11:07 | 1 |
| Dibromofluoromethane | 100 | | 75 - 126 | | 11/08/17 11:07 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | | 11/08/17 11:07 | 1 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 | | 11/08/17 11:07 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-408942/4

Matrix: Solid

Analysis Batch: 408942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0590 | | mg/Kg | | 118 | 40 - 150 |
| Benzene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0524 | | mg/Kg | | 105 | 67 - 129 |
| Bromoform | 0.0500 | 0.0557 | | mg/Kg | | 111 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0438 | | mg/Kg | | 88 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0573 | | mg/Kg | | 115 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0473 | | mg/Kg | | 95 | 75 - 125 |
| Chloroform | 0.0500 | 0.0525 | | mg/Kg | | 105 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0402 | | mg/Kg | | 80 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0547 | | mg/Kg | | 109 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0586 | | mg/Kg | | 117 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0527 | | mg/Kg | | 105 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0384 | | mg/Kg | | 77 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0468 | | mg/Kg | | 94 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0382 | | mg/Kg | | 76 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0543 | | mg/Kg | | 109 | 50 - 140 |
| Styrene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 70 - 125 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0464 | | mg/Kg | | 93 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 124 |
| Toluene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0516 | | mg/Kg | | 103 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0557 | | mg/Kg | | 111 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0518 | | mg/Kg | | 104 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0425 | | mg/Kg | | 85 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.0998 | | mg/Kg | | 100 | 53 - 147 |

| Surrogate | LCS LCS | | Limits |
|------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 85 | | 75 - 131 |
| Dibromofluoromethane | 100 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 104 | | 70 - 134 |
| Toluene-d8 (Surr) | 97 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-408942/5

Matrix: Solid

Analysis Batch: 408942

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0497 | | mg/Kg | | 99 | 40 - 150 | 17 | 30 |
| Benzene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 125 | 3 | 30 |
| Bromodichloromethane | 0.0500 | 0.0497 | | mg/Kg | | 99 | 67 - 129 | 5 | 30 |
| Bromoform | 0.0500 | 0.0537 | | mg/Kg | | 107 | 68 - 136 | 4 | 30 |
| Bromomethane | 0.0500 | 0.0385 | | mg/Kg | | 77 | 70 - 130 | 18 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0400 | | mg/Kg | | 80 | 47 - 138 | 9 | 30 |
| Carbon disulfide | 0.0500 | 0.0430 | | mg/Kg | | 86 | 70 - 129 | 12 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0516 | | mg/Kg | | 103 | 75 - 125 | 10 | 30 |
| Chlorobenzene | 0.0500 | 0.0430 | | mg/Kg | | 86 | 50 - 150 | 14 | 30 |
| Chloroethane | 0.0500 | 0.0462 | | mg/Kg | | 92 | 75 - 125 | 2 | 30 |
| Chloroform | 0.0500 | 0.0501 | | mg/Kg | | 100 | 57 - 135 | 5 | 30 |
| Chloromethane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 70 - 125 | 9 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 | 0 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0546 | | mg/Kg | | 109 | 70 - 125 | 10 | 30 |
| Dibromochloromethane | 0.0500 | 0.0517 | | mg/Kg | | 103 | 69 - 125 | 6 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0442 | | mg/Kg | | 88 | 70 - 125 | 12 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0522 | | mg/Kg | | 104 | 70 - 130 | 12 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0505 | | mg/Kg | | 101 | 70 - 120 | 4 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 70 - 125 | 3 | 30 |
| Ethylbenzene | 0.0500 | 0.0449 | | mg/Kg | | 90 | 61 - 136 | 7 | 30 |
| 2-Hexanone | 0.0500 | 0.0374 | | mg/Kg | | 75 | 48 - 146 | 3 | 30 |
| Methylene Chloride | 0.0500 | 0.0429 | | mg/Kg | | 86 | 70 - 126 | 9 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0414 | | mg/Kg | | 83 | 50 - 148 | 8 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0400 | | mg/Kg | | 80 | 50 - 140 | 30 | 30 |
| Styrene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 125 | 1 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0465 | | mg/Kg | | 93 | 70 - 122 | 0 | 30 |
| Tetrachloroethene | 0.0500 | 0.0526 | | mg/Kg | | 105 | 70 - 124 | 3 | 30 |
| Toluene | 0.0500 | 0.0558 | | mg/Kg | | 112 | 70 - 125 | 15 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0397 | | mg/Kg | | 79 | 70 - 125 | 23 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0548 | | mg/Kg | | 110 | 70 - 125 | 6 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 70 - 128 | 10 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0550 | | mg/Kg | | 110 | 70 - 125 | 7 | 30 |
| Trichloroethene | 0.0500 | 0.0513 | | mg/Kg | | 103 | 70 - 125 | 1 | 30 |
| Vinyl acetate | 0.0500 | 0.0429 | | mg/Kg | | 86 | 40 - 153 | 19 | 30 |
| Vinyl chloride | 0.0500 | 0.0467 | | mg/Kg | | 93 | 70 - 125 | 9 | 30 |
| Xylenes, Total | 0.100 | 0.0997 | | mg/Kg | | 100 | 53 - 147 | 0 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 90 | | 75 - 131 |
| Dibromofluoromethane | 96 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 70 - 134 |
| Toluene-d8 (Surr) | 110 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-409543/1-A

Matrix: Solid

Analysis Batch: 409648

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 409543

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-409543/1-A
Matrix: Solid
Analysis Batch: 409648

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409543

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/12/17 02:23 | 11/13/17 13:10 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 83 | | 44 - 121 | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2-Fluorophenol | 93 | | 46 - 133 | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Nitrobenzene-d5 | 92 | | 41 - 120 | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Phenol-d5 | 83 | | 46 - 125 | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| Terphenyl-d14 | 78 | | 35 - 160 | 11/12/17 02:23 | 11/13/17 13:10 | 1 |
| 2,4,6-Tribromophenol | 57 | | 25 - 139 | 11/12/17 02:23 | 11/13/17 13:10 | 1 |

Lab Sample ID: LCS 500-409543/2-A
Matrix: Solid
Analysis Batch: 409648

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409543

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 1.01 | | mg/Kg | | 76 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.03 | | mg/Kg | | 77 | 60 - 110 |
| Anthracene | 1.33 | 1.08 | | mg/Kg | | 81 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 0.987 | | mg/Kg | | 74 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.09 | | mg/Kg | | 82 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.12 | | mg/Kg | | 84 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.11 | | mg/Kg | | 83 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.05 | | mg/Kg | | 78 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 1.11 | | mg/Kg | | 83 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 1.01 | | mg/Kg | | 76 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.02 | | mg/Kg | | 77 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 1.04 | | mg/Kg | | 78 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.04 | | mg/Kg | | 78 | 61 - 116 |
| Carbazole | 1.33 | 1.11 | | mg/Kg | | 83 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 1.00 | | mg/Kg | | 75 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 1.12 | | mg/Kg | | 84 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.06 | | mg/Kg | | 79 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 0.999 | | mg/Kg | | 75 | 64 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409543/2-A
Matrix: Solid
Analysis Batch: 409648

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409543

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| 4-Chlorophenyl phenyl ether | 1.33 | 1.07 | | mg/Kg | | 80 | 63 - 110 |
| Chrysene | 1.33 | 0.987 | | mg/Kg | | 74 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.14 | | mg/Kg | | 86 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.06 | | mg/Kg | | 79 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 0.967 | | mg/Kg | | 73 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 0.936 | | mg/Kg | | 70 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 0.968 | | mg/Kg | | 73 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 0.966 | | mg/Kg | | 72 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.04 | | mg/Kg | | 78 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.10 | | mg/Kg | | 82 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.06 | | mg/Kg | | 80 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.08 | | mg/Kg | | 81 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.11 | | mg/Kg | | 83 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 0.855 | | mg/Kg | | 32 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | <0.67 | | mg/Kg | | 20 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.08 | | mg/Kg | | 81 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.11 | | mg/Kg | | 83 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 0.966 | | mg/Kg | | 72 | 63 - 119 |
| Fluoranthene | 1.33 | 1.11 | | mg/Kg | | 83 | 62 - 120 |
| Fluorene | 1.33 | 1.07 | | mg/Kg | | 80 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.05 | | mg/Kg | | 79 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 1.01 | | mg/Kg | | 76 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.914 | | mg/Kg | | 69 | 10 - 106 |
| Hexachloroethane | 1.33 | 0.997 | | mg/Kg | | 75 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.12 | | mg/Kg | | 84 | 57 - 127 |
| Isophorone | 1.33 | 1.10 | | mg/Kg | | 83 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 1.07 | | mg/Kg | | 80 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.12 | | mg/Kg | | 84 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.08 | | mg/Kg | | 81 | 57 - 120 |
| Naphthalene | 1.33 | 1.05 | | mg/Kg | | 78 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 1.23 | | mg/Kg | | 92 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 0.946 | | mg/Kg | | 71 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.30 | | mg/Kg | | 97 | 60 - 160 |
| Nitrobenzene | 1.33 | 1.21 | | mg/Kg | | 91 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.02 | | mg/Kg | | 76 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 2.25 | | mg/Kg | | 85 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 1.19 | | mg/Kg | | 89 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.07 | | mg/Kg | | 80 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 1.45 | | mg/Kg | | 109 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.58 | | mg/Kg | | 59 | 13 - 112 |
| Phenanthrene | 1.33 | 1.08 | | mg/Kg | | 81 | 62 - 120 |
| Phenol | 1.33 | 1.07 | | mg/Kg | | 80 | 56 - 122 |
| Pyrene | 1.33 | 1.03 | | mg/Kg | | 77 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 1.04 | | mg/Kg | | 78 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 1.09 | | mg/Kg | | 82 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 1.05 | | mg/Kg | | 79 | 57 - 120 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-409543/2-A
Matrix: Solid
Analysis Batch: 409648

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409543

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|------------------|------------------|----------|
| 2-Fluorobiphenyl | 88 | | 44 - 121 |
| 2-Fluorophenol | 86 | | 46 - 133 |
| Nitrobenzene-d5 | 90 | | 41 - 120 |
| Phenol-d5 | 89 | | 46 - 125 |
| Terphenyl-d14 | 83 | | 35 - 160 |
| 2,4,6-Tribromophenol | 77 | | 25 - 139 |

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-408756/1-A
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408756

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------------|-----------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Cadmium | <0.20 | | 0.20 | 0.036 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Copper | 0.394 | J | 1.0 | 0.28 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/07/17 08:36 | 11/07/17 15:02 | 1 |

Lab Sample ID: LCS 500-408756/2-A
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408756

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|----------------|---------------|------------------|-------|---|------|----------|
| Antimony | 50.0 | 44.1 | | mg/Kg | | 88 | 80 - 120 |
| Arsenic | 10.0 | 9.69 | | mg/Kg | | 97 | 80 - 120 |
| Barium | 200 | 195 | | mg/Kg | | 97 | 80 - 120 |
| Beryllium | 5.00 | 4.71 | | mg/Kg | | 94 | 80 - 120 |
| Cadmium | 5.00 | 4.82 | | mg/Kg | | 96 | 80 - 120 |
| Chromium | 20.0 | 18.9 | | mg/Kg | | 94 | 80 - 120 |
| Cobalt | 50.0 | 46.9 | | mg/Kg | | 94 | 80 - 120 |
| Copper | 25.0 | 24.0 | | mg/Kg | | 96 | 80 - 120 |
| Iron | 100 | 94.2 | | mg/Kg | | 94 | 80 - 120 |
| Lead | 10.0 | 9.70 | | mg/Kg | | 97 | 80 - 120 |
| Manganese | 50.0 | 45.1 | | mg/Kg | | 90 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-408756/2-A
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408756
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|-------|---|------|----------|
| Nickel | 50.0 | 48.0 | | mg/Kg | | 96 | 80 - 120 |
| Selenium | 10.0 | 9.21 | | mg/Kg | | 92 | 80 - 120 |
| Silver | 5.00 | 4.64 | | mg/Kg | | 93 | 80 - 120 |
| Thallium | 10.0 | 9.13 | | mg/Kg | | 91 | 80 - 120 |
| Vanadium | 50.0 | 44.4 | | mg/Kg | | 89 | 80 - 120 |
| Zinc | 50.0 | 42.3 | | mg/Kg | | 85 | 80 - 120 |

Lab Sample ID: 500-136798-1 MS
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: 3160-8-2 (0-3)
Prep Type: Total/NA
Prep Batch: 408756
%Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Antimony | 0.77 | J F1 F2 | 26.4 | 4.77 | F1 | mg/Kg | ☼ | 15 | 75 - 125 |
| Arsenic | 8.1 | | 5.28 | 12.7 | | mg/Kg | ☼ | 86 | 75 - 125 |
| Barium | 100 | | 106 | 202 | | mg/Kg | ☼ | 95 | 75 - 125 |
| Beryllium | 0.55 | | 2.64 | 2.81 | | mg/Kg | ☼ | 86 | 75 - 125 |
| Cadmium | 0.18 | | 2.64 | 2.40 | | mg/Kg | ☼ | 84 | 75 - 125 |
| Chromium | 14 | | 10.6 | 25.6 | | mg/Kg | ☼ | 110 | 75 - 125 |
| Cobalt | 13 | | 26.4 | 37.1 | | mg/Kg | ☼ | 93 | 75 - 125 |
| Copper | 17 | B F1 | 13.2 | 26.3 | F1 | mg/Kg | ☼ | 69 | 75 - 125 |
| Iron | 15000 | | 52.8 | 15900 | 4 | mg/Kg | ☼ | 1211 | 75 - 125 |
| Lead | 54 | | 5.28 | 45.8 | 4 | mg/Kg | ☼ | -163 | 75 - 125 |
| Manganese | 720 | | 26.4 | 692 | 4 | mg/Kg | ☼ | -118 | 75 - 125 |
| Nickel | 11 | | 26.4 | 38.0 | | mg/Kg | ☼ | 104 | 75 - 125 |
| Selenium | 0.97 | F1 | 5.28 | 4.43 | F1 | mg/Kg | ☼ | 66 | 75 - 125 |
| Silver | <0.29 | | 2.64 | 2.12 | | mg/Kg | ☼ | 80 | 75 - 125 |
| Thallium | <0.59 | | 5.28 | 4.62 | | mg/Kg | ☼ | 88 | 75 - 125 |
| Vanadium | 26 | | 26.4 | 50.6 | | mg/Kg | ☼ | 93 | 75 - 125 |
| Zinc | 54 | F1 | 26.4 | 71.2 | F1 | mg/Kg | ☼ | 65 | 75 - 125 |

Lab Sample ID: 500-136798-1 MSD
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: 3160-8-2 (0-3)
Prep Type: Total/NA
Prep Batch: 408756
%Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|-----------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-----------|
| Antimony | 0.77 | J F1 F2 | 30.5 | 5.97 | F1 F4 | mg/Kg | ☼ | 17 | 75 - 125 | 22 | 20 |
| Arsenic | 8.1 | | 6.10 | 14.1 | | mg/Kg | ☼ | 98 | 75 - 125 | 11 | 20 |
| Barium | 100 | | 122 | 218 | | mg/Kg | ☼ | 95 | 75 - 125 | 7 | 20 |
| Beryllium | 0.55 | | 3.05 | 3.17 | | mg/Kg | ☼ | 86 | 75 - 125 | 12 | 20 |
| Cadmium | 0.18 | | 3.05 | 2.80 | | mg/Kg | ☼ | 86 | 75 - 125 | 15 | 20 |
| Chromium | 14 | | 12.2 | 25.5 | | mg/Kg | ☼ | 95 | 75 - 125 | 0 | 20 |
| Cobalt | 13 | | 30.5 | 41.8 | | mg/Kg | ☼ | 96 | 75 - 125 | 12 | 20 |
| Copper | 17 | B F1 | 15.2 | 27.7 | F1 | mg/Kg | ☼ | 70 | 75 - 125 | 5 | 20 |
| Iron | 15000 | | 61.0 | 15900 | 4 | mg/Kg | ☼ | 947 | 75 - 125 | 0 | 20 |
| Lead | 54 | | 6.10 | 46.7 | 4 | mg/Kg | ☼ | -127 | 75 - 125 | 2 | 20 |
| Manganese | 720 | | 30.5 | 807 | 4 | mg/Kg | ☼ | 275 | 75 - 125 | 15 | 20 |
| Nickel | 11 | | 30.5 | 42.0 | | mg/Kg | ☼ | 103 | 75 - 125 | 10 | 20 |
| Selenium | 0.97 | F1 | 6.10 | 5.29 | F1 | mg/Kg | ☼ | 71 | 75 - 125 | 18 | 20 |
| Silver | <0.29 | | 3.05 | 2.49 | | mg/Kg | ☼ | 82 | 75 - 125 | 16 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-136798-1 MSD
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: 3160-8-2 (0-3)
Prep Type: Total/NA
Prep Batch: 408756

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|--------|-----------|-------|--------|-----------|-------|---|------|-----------------|-----|--------------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | | |
| Thallium | <0.59 | | 6.10 | 5.37 | | mg/Kg | ☼ | 88 | 75 - 125 | 15 | 20 |
| Vanadium | 26 | | 30.5 | 52.4 | | mg/Kg | ☼ | 87 | 75 - 125 | 3 | 20 |
| Zinc | 54 | F1 | 30.5 | 74.6 | F1 | mg/Kg | ☼ | 68 | 75 - 125 | 5 | 20 |

Lab Sample ID: 500-136798-1 DU
Matrix: Solid
Analysis Batch: 408957

Client Sample ID: 3160-8-2 (0-3)
Prep Type: Total/NA
Prep Batch: 408756

| Analyte | Sample | Sample | DU | DU | Unit | D | RPD | RPD Limit |
|-----------|--------|-----------|--------|-----------|-------|---|-----|--------------|
| | Result | Qualifier | Result | Qualifier | | | | |
| Antimony | 0.77 | J F1 F2 | <1.1 | | mg/Kg | ☼ | NC | 20 |
| Arsenic | 8.1 | | 10.0 | F3 | mg/Kg | ☼ | 21 | 20 |
| Barium | 100 | | 98.0 | | mg/Kg | ☼ | 4 | 20 |
| Beryllium | 0.55 | | 0.578 | | mg/Kg | ☼ | 5 | 20 |
| Cadmium | 0.18 | | 0.124 | F5 | mg/Kg | ☼ | 39 | 20 |
| Chromium | 14 | | 17.1 | F3 | mg/Kg | ☼ | 21 | 20 |
| Cobalt | 13 | | 10.1 | F3 | mg/Kg | ☼ | 21 | 20 |
| Copper | 17 | B F1 | 14.8 | | mg/Kg | ☼ | 14 | 20 |
| Iron | 15000 | | 17800 | | mg/Kg | ☼ | 16 | 20 |
| Lead | 54 | | 38.9 | F3 | mg/Kg | ☼ | 33 | 20 |
| Manganese | 720 | | 595 | | mg/Kg | ☼ | 19 | 20 |
| Nickel | 11 | | 10.9 | | mg/Kg | ☼ | 3 | 20 |
| Selenium | 0.97 | F1 | 0.882 | | mg/Kg | ☼ | 9 | 20 |
| Silver | <0.29 | | <0.28 | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.59 | | <0.56 | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 26 | | 28.1 | | mg/Kg | ☼ | 8 | 20 |
| Zinc | 54 | F1 | 45.5 | | mg/Kg | ☼ | 17 | 20 |

Lab Sample ID: LCS 500-409364/2-A
Matrix: Solid
Analysis Batch: 409503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409364

| Analyte | Spike | LCS | LCS | Unit | D | %Rec | %Rec. Limits |
|-----------|--------|--------|-----------|------|---|------|-----------------|
| | Added | Result | Qualifier | | | | |
| Arsenic | 0.100 | 0.0986 | | mg/L | | 99 | 80 - 120 |
| Barium | 0.500 | 0.517 | | mg/L | | 103 | 80 - 120 |
| Beryllium | 0.0500 | 0.0524 | | mg/L | | 105 | 80 - 120 |
| Cadmium | 0.0500 | 0.0498 | | mg/L | | 100 | 80 - 120 |
| Chromium | 0.200 | 0.202 | | mg/L | | 101 | 80 - 120 |
| Cobalt | 0.500 | 0.505 | | mg/L | | 101 | 80 - 120 |
| Copper | 0.250 | 0.256 | | mg/L | | 102 | 80 - 120 |
| Iron | 1.00 | 1.18 | | mg/L | | 118 | 80 - 120 |
| Lead | 0.100 | 0.0955 | | mg/L | | 95 | 80 - 120 |
| Manganese | 0.500 | 0.516 | | mg/L | | 103 | 80 - 120 |
| Nickel | 0.500 | 0.503 | | mg/L | | 101 | 80 - 120 |
| Selenium | 0.100 | 0.0920 | | mg/L | | 92 | 80 - 120 |
| Silver | 0.0500 | 0.0491 | | mg/L | | 98 | 80 - 120 |
| Vanadium | 0.500 | 0.509 | | mg/L | | 102 | 80 - 120 |
| Zinc | 0.500 | 0.496 | J | mg/L | | 99 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-409249/1-B
Matrix: Solid
Analysis Batch: 409503

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 409364

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/10/17 08:30 | 11/10/17 14:59 | 1 |

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-409364/2-A
Matrix: Solid
Analysis Batch: 409646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409364
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.500 | 0.478 | | mg/L | | 96 | 80 - 120 |
| Thallium | 0.100 | 0.100 | | mg/L | | 100 | 80 - 120 |

Lab Sample ID: LB 500-409249/1-B
Matrix: Solid
Analysis Batch: 409646

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 409364

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/10/17 08:30 | 11/10/17 16:03 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/10/17 08:30 | 11/10/17 16:03 | 1 |

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-409460/12-A
Matrix: Solid
Analysis Batch: 409718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409460

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/10/17 15:00 | 11/13/17 08:24 | 1 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-409460/13-A
Matrix: Solid
Analysis Batch: 409718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409460

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|------|---|------|----------|
| Mercury | 0.00200 | 0.00230 | | mg/L | | 115 | 80 - 120 |

Lab Sample ID: LB 500-409249/1-E
Matrix: Solid
Analysis Batch: 409718

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 409460

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/10/17 15:00 | 11/13/17 08:41 | 1 |

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-409061/12-A
Matrix: Solid
Analysis Batch: 409233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409061

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | <0.017 | | 0.017 | 0.0056 | mg/Kg | | 11/08/17 16:15 | 11/09/17 09:53 | 1 |

Lab Sample ID: LCS 500-409061/13-A
Matrix: Solid
Analysis Batch: 409233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409061

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.173 | | mg/Kg | | 103 | 80 - 120 |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-2 (0-3)

Date Collected: 11/03/17 08:00

Date Received: 11/04/17 11:05

Lab Sample ID: 500-136798-1

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 409249 | 11/09/17 14:56 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 409364 | 11/10/17 08:30 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409503 | 11/10/17 15:52 | KML | TAL CHI |
| TCLP | Leach | 1311 | | | 409249 | 11/09/17 14:56 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 409364 | 11/10/17 08:30 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 16:11 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 409249 | 11/09/17 14:56 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 409460 | 11/10/17 15:00 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409718 | 11/13/17 09:33 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 409880 | | SMO | TAL CHI |
| | | | | | (Start) | 11/14/17 17:36 | | |
| | | | | | (End) | 11/14/17 12:20 | | |
| Total/NA | Analysis | Moisture | | 1 | 408654 | 11/06/17 14:52 | PFK | TAL CHI |

Client Sample ID: 3160-8-2 (0-3)

Date Collected: 11/03/17 08:00

Date Received: 11/04/17 11:05

Lab Sample ID: 500-136798-1

Matrix: Solid

Percent Solids: 80.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408715 | 11/04/17 15:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 11:35 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409543 | 11/12/17 02:23 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409849 | 11/14/17 17:04 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408756 | 11/07/17 08:36 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408957 | 11/07/17 15:10 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 409061 | 11/08/17 16:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409233 | 11/09/17 10:14 | EEN | TAL CHI |

Client Sample ID: 3160-8-1 (0-3)

Date Collected: 11/03/17 08:10

Date Received: 11/04/17 11:05

Lab Sample ID: 500-136798-2

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 409249 | 11/09/17 14:56 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 409364 | 11/10/17 08:30 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 409503 | 11/10/17 15:56 | KML | TAL CHI |
| TCLP | Leach | 1311 | | | 409249 | 11/09/17 14:56 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 409364 | 11/10/17 08:30 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 409646 | 11/10/17 16:15 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 409249 | 11/09/17 14:56 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 409460 | 11/10/17 15:00 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 409718 | 11/13/17 09:55 | EEN | TAL CHI |

TestAmerica Chicago

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

Date Collected: 11/03/17 08:10

Matrix: Solid

Date Received: 11/04/17 11:05

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| Total/NA | Analysis | 9045D | | 1 | 409880 | 11/14/17 17:36 (Start) 11/14/17 12:20 (End) | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 408654 | 11/06/17 14:52 | PFK | TAL CHI |

Client Sample ID: 3160-8-1 (0-3)

Lab Sample ID: 500-136798-2

Date Collected: 11/03/17 08:10

Matrix: Solid

Date Received: 11/04/17 11:05

Percent Solids: 83.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 408715 | 11/04/17 15:18 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 408942 | 11/08/17 12:00 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 409543 | 11/12/17 02:23 | JP1 | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 409849 | 11/14/17 17:31 | WDS | TAL CHI |
| Total/NA | Prep | 3050B | | | 408756 | 11/07/17 08:36 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 408957 | 11/07/17 15:37 | PJ1 | TAL CHI |
| Total/NA | Prep | 7471B | | | 409061 | 11/08/17 16:15 | EEN | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 409233 | 11/09/17 10:16 | EEN | TAL CHI |

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-136798-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| Illinois | NELAP | 5 | 100201 | 04-30-18 |

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|----------------------------|
| 6020A | 3010A | Solid | Antimony |
| 6020A | 3010A | Solid | Thallium |
| 8260B | 5035 | Solid | 1,3-Dichloropropene, Total |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

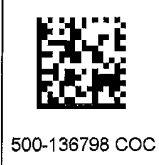
Report To (optional) TERRY DIXON
 Contact: TERRY DIXON
 Company: AMELFW WOOD
 Address: 4232 BRANDYWINE
 Address: Suite A peoria IL
 Phone: 61614
 Fax: 309-692-4422
 E-Mail:

Bill To (optional) SAME
 Contact: SAME
 Company:
 Address:
 Address:
 Phone:
 Fax:
 PO#/Reference#

Chain of Custody Record

Lab Job #: 500-136798
 Chain of Custody Number: _____
 Page 1 of 1
 Temperature °C of Cooler: 2.0

| Client | | Client Project # | | Preservative | | Parameter | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | | Matrix | |
|--------------------|--|------------------------|--|------------------------|--|-------------|--|-----------------|--|----------|--|--------------------|--|------------|--|---|--|----------|--|----------|--|
| <u>Amelfw wood</u> | | <u>3160150049</u> | | | | | | | | | | | | | | | | | | | |
| Project Name | | | | Project Location/State | | | | Lab Project # | | | | Lab PM | | | | Preservative Key | | | | | |
| <u>IOat WO 28</u> | | | | <u>Benton, IL</u> | | | | <u>50013898</u> | | | | <u>DICK WRIGHT</u> | | | | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | | | | | |
| Sampler | | Lab Project # | | Date | | Time | | # of Containers | | Matrix | | TOTAL METALS | | TLP METALS | | SPLP METALS | | PH | | 90solids | |
| <u>Tom McNally</u> | | <u>50013898</u> | | <u>11/3</u> | | <u>0800</u> | | <u>6 S</u> | | <u>S</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | |
| Lab ID | | Sample ID | | Date | | Time | | # of Containers | | Matrix | | TOTAL METALS | | TLP METALS | | SPLP METALS | | PH | | 90solids | |
| <u>1</u> | | <u>3160-8-2 (0-3')</u> | | <u>11/3</u> | | <u>0800</u> | | <u>6 S</u> | | <u>S</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | |
| <u>2</u> | | <u>3160-8-1 (0-3')</u> | | <u>11/3</u> | | <u>0810</u> | | <u>6 S</u> | | <u>S</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | | <u>X</u> | |



Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other ROUTINE
 Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | |
|---------------------------------------|-------------------------------|------------------------|---------------------|-----------------------------------|-------------------------|------------------------|---------------------|
| Relinquished By <u>[Signature]</u> | Company <u>Amelfw wood</u> | Date <u>11/3/17</u> | Time <u>1600</u> | Received By <u>[Signature]</u> | Company <u>TAUSA</u> | Date <u>11/4/17</u> | Time <u>1105</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time |

Lab Courier: _____
 Shipped: FX SATURDAY
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____
 Lab Comments: _____

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-136798-1

Login Number: 136798

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.0 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-137674-1
Client Project/Site: IDOT - Benton - WO 028

For:
AMEC Foster Wheeler E & I, Inc
4232 Brandywine Drive
Suite A
Peoria, Illinois 61614

Attn: Mr. Terry Dixon

Jodie Bracken

Authorized for release by:
11/30/2017 2:53:14 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for
Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Table of Contents

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Case Narrative

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Job ID: 500-137674-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-137674-1**

Receipt

The sample was received on 11/22/2017 9:05 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Detection Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Client Sample ID: 3160-32-07

Lab Sample ID: 500-137674-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil | Fac | D | Method | Prep Type |
|---------------------|--------|-----------|-------|--------|-------|-----|-----|-------|-----------|-----------|
| Benzo[a]anthracene | 0.0054 | J | 0.040 | 0.0054 | mg/Kg | 1 | ☼ | 8270D | Total/NA | |
| 2-Methylnaphthalene | 0.021 | J | 0.081 | 0.0074 | mg/Kg | 1 | ☼ | 8270D | Total/NA | |
| Naphthalene | 0.0094 | J | 0.040 | 0.0062 | mg/Kg | 1 | ☼ | 8270D | Total/NA | |
| Phenanthrene | 0.027 | J | 0.040 | 0.0056 | mg/Kg | 1 | ☼ | 8270D | Total/NA | |
| Arsenic | 10 | F1 | 0.61 | 0.21 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Barium | 79 | | 0.61 | 0.070 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Beryllium | 0.36 | | 0.24 | 0.057 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Cadmium | 0.022 | J B | 0.12 | 0.022 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Chromium | 21 | | 0.61 | 0.30 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Cobalt | 4.3 | | 0.31 | 0.080 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Copper | 14 | | 0.61 | 0.17 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Iron | 25000 | | 12 | 6.4 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Lead | 16 | F1 | 0.31 | 0.14 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Manganese | 180 | F2 | 0.61 | 0.089 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Nickel | 15 | | 0.61 | 0.18 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Selenium | 0.53 | J F1 | 0.61 | 0.36 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Vanadium | 43 | | 0.31 | 0.072 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Zinc | 59 | | 1.2 | 0.54 | mg/Kg | 1 | ☼ | 6010B | Total/NA | |
| Barium | 0.37 | J | 0.50 | 0.050 | mg/L | 1 | | 6010B | TCLP | |
| Cobalt | 0.014 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP | |
| Copper | 0.021 | J | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP | |
| Iron | 0.40 | | 0.40 | 0.20 | mg/L | 1 | | 6010B | TCLP | |
| Manganese | 1.7 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP | |
| Nickel | 0.048 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | TCLP | |
| Zinc | 0.22 | J | 0.50 | 0.020 | mg/L | 1 | | 6010B | TCLP | |
| Manganese | 0.20 | | 0.025 | 0.010 | mg/L | 1 | | 6010B | SPLP East | |
| Mercury | 0.022 | B | 0.020 | 0.0068 | mg/Kg | 1 | ☼ | 7471B | Total/NA | |
| pH | 5.4 | | 0.20 | 0.20 | SU | 1 | | 9045D | Total/NA | |

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 500-137674-1 | 3160-32-07 | Solid | 11/21/17 15:05 | 11/22/17 13:58 |

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Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Client Sample ID: 3160-32-07

Lab Sample ID: 500-137674-1

Date Collected: 11/21/17 15:05

Matrix: Solid

Date Received: 11/22/17 13:58

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00066 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00097 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00061 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00071 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00087 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0018 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00065 | mg/Kg | ☼ | 11/22/17 17:00 | 11/27/17 12:01 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 103 | | 75 - 131 | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Dibromofluoromethane | 103 | | 75 - 126 | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 103 | | 70 - 134 | 11/22/17 17:00 | 11/27/17 12:01 | 1 |
| Toluene-d8 (Surr) | 92 | | 75 - 124 | 11/22/17 17:00 | 11/27/17 12:01 | 1 |

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.040 | | 0.040 | 0.0072 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Acenaphthylene | <0.040 | | 0.040 | 0.0053 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Anthracene | <0.040 | | 0.040 | 0.0067 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Benzo[a]anthracene | 0.0054 | J | 0.040 | 0.0054 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Client Sample ID: 3160-32-07

Lab Sample ID: 500-137674-1

Date Collected: 11/21/17 15:05

Matrix: Solid

Date Received: 11/22/17 13:58

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|---------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Benzo[a]pyrene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Benzo[b]fluoranthene | <0.040 | | 0.040 | 0.0087 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Benzo[g,h,i]perylene | <0.040 | F1 | 0.040 | 0.013 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Benzo[k]fluoranthene | <0.040 | | 0.040 | 0.012 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Bis(2-chloroethoxy)methane | <0.20 | | 0.20 | 0.041 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Bis(2-chloroethyl)ether | <0.20 | F1 F2 | 0.20 | 0.060 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 0.20 | 0.073 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 4-Bromophenyl phenyl ether | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Butyl benzyl phthalate | <0.20 | | 0.20 | 0.076 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Carbazole | <0.20 | | 0.20 | 0.10 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 4-Chloroaniline | <0.81 | | 0.81 | 0.19 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 4-Chloro-3-methylphenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Chloronaphthalene | <0.20 | | 0.20 | 0.044 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Chlorophenol | <0.20 | | 0.20 | 0.069 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Chrysene | <0.040 | | 0.040 | 0.011 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Dibenz(a,h)anthracene | <0.040 | | 0.040 | 0.0078 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Dibenzofuran | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 1,2-Dichlorobenzene | <0.20 | F1 | 0.20 | 0.048 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 1,3-Dichlorobenzene | <0.20 | F1 | 0.20 | 0.045 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 1,4-Dichlorobenzene | <0.20 | F1 | 0.20 | 0.052 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 3,3'-Dichlorobenzidine | <0.20 | F1 | 0.20 | 0.056 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4-Dichlorophenol | <0.40 | | 0.40 | 0.096 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Diethyl phthalate | <0.20 | | 0.20 | 0.068 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4-Dimethylphenol | <0.40 | | 0.40 | 0.15 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Dimethyl phthalate | <0.20 | | 0.20 | 0.053 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Di-n-butyl phthalate | <0.20 | | 0.20 | 0.061 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 0.81 | 0.32 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4-Dinitrophenol | <0.81 | F2 | 0.81 | 0.71 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4-Dinitrotoluene | <0.20 | | 0.20 | 0.064 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,6-Dinitrotoluene | <0.20 | | 0.20 | 0.079 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Di-n-octyl phthalate | <0.20 | | 0.20 | 0.066 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Fluoranthene | <0.040 | | 0.040 | 0.0075 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Fluorene | <0.040 | | 0.040 | 0.0057 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Hexachlorobenzene | <0.081 | | 0.081 | 0.0093 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Hexachlorobutadiene | <0.20 | | 0.20 | 0.063 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Hexachlorocyclopentadiene | <0.81 | | 0.81 | 0.23 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Hexachloroethane | <0.20 | F1 | 0.20 | 0.061 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Isophorone | <0.20 | | 0.20 | 0.045 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Methylnaphthalene | 0.021 | J | 0.081 | 0.0074 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Methylphenol | <0.20 | | 0.20 | 0.065 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 3 & 4 Methylphenol | <0.20 | | 0.20 | 0.067 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Naphthalene | 0.0094 | J | 0.040 | 0.0062 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Nitroaniline | <0.20 | | 0.20 | 0.054 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 3-Nitroaniline | <0.40 | | 0.40 | 0.12 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 4-Nitroaniline | <0.40 | | 0.40 | 0.17 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Nitrobenzene | <0.040 | | 0.040 | 0.010 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Nitrophenol | <0.40 | | 0.40 | 0.095 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Client Sample ID: 3160-32-07

Lab Sample ID: 500-137674-1

Date Collected: 11/21/17 15:05

Matrix: Solid

Date Received: 11/22/17 13:58

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| 4-Nitrophenol | <0.81 | | 0.81 | 0.38 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| N-Nitrosodi-n-propylamine | <0.081 | | 0.081 | 0.049 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| N-Nitrosodiphenylamine | <0.20 | | 0.20 | 0.047 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | F1 | 0.20 | 0.047 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Pentachlorophenol | <0.81 | | 0.81 | 0.65 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Phenanthrene | 0.027 | J | 0.040 | 0.0056 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Phenol | <0.20 | | 0.20 | 0.089 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Pyrene | <0.040 | | 0.040 | 0.0080 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 1,2,4-Trichlorobenzene | <0.20 | | 0.20 | 0.043 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4,5-Trichlorophenol | <0.40 | | 0.40 | 0.092 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4,6-Trichlorophenol | <0.40 | | 0.40 | 0.14 | mg/Kg | ☼ | 11/22/17 16:19 | 11/27/17 16:03 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 68 | | 44 - 121 | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2-Fluorophenol | 82 | | 46 - 133 | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Nitrobenzene-d5 | 64 | | 41 - 120 | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Phenol-d5 | 67 | | 46 - 125 | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| Terphenyl-d14 | 63 | | 35 - 160 | 11/22/17 16:19 | 11/27/17 16:03 | 1 |
| 2,4,6-Tribromophenol | 81 | | 25 - 139 | 11/22/17 16:19 | 11/27/17 16:03 | 1 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.020 | | 0.020 | 0.0072 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| PCB-1221 | <0.020 | | 0.020 | 0.0089 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| PCB-1232 | <0.020 | | 0.020 | 0.0088 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| PCB-1242 | <0.020 | | 0.020 | 0.0066 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| PCB-1248 | <0.020 | | 0.020 | 0.0080 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| PCB-1254 | <0.020 | | 0.020 | 0.0044 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| PCB-1260 | <0.020 | | 0.020 | 0.0099 | mg/Kg | ☼ | 11/24/17 07:47 | 11/30/17 11:32 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 79 | | 49 - 129 | 11/24/17 07:47 | 11/30/17 11:32 | 1 |
| DCB Decachlorobiphenyl | 115 | | 37 - 121 | 11/24/17 07:47 | 11/30/17 11:32 | 1 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <1.2 | F1 | 1.2 | 0.24 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Arsenic | 10 | F1 | 0.61 | 0.21 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Barium | 79 | | 0.61 | 0.070 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Beryllium | 0.36 | | 0.24 | 0.057 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Cadmium | 0.022 | J B | 0.12 | 0.022 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Chromium | 21 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Cobalt | 4.3 | | 0.31 | 0.080 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Copper | 14 | | 0.61 | 0.17 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Iron | 25000 | | 12 | 6.4 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Lead | 16 | F1 | 0.31 | 0.14 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Manganese | 180 | F2 | 0.61 | 0.089 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Nickel | 15 | | 0.61 | 0.18 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Selenium | 0.53 | J F1 | 0.61 | 0.36 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Silver | <0.31 | | 0.31 | 0.079 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |

TestAmerica Chicago

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Client Sample ID: 3160-32-07

Lab Sample ID: 500-137674-1

Date Collected: 11/21/17 15:05

Matrix: Solid

Date Received: 11/22/17 13:58

Percent Solids: 80.8

Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-------|-------|---|----------------|----------------|---------|
| Thallium | <0.61 | | 0.61 | 0.30 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Vanadium | 43 | | 0.31 | 0.072 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |
| Zinc | 59 | | 1.2 | 0.54 | mg/Kg | ☼ | 11/23/17 07:44 | 11/23/17 23:17 | 1 |

Method: 6010B - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Barium | 0.37 | J | 0.50 | 0.050 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Cobalt | 0.014 | J | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Copper | 0.021 | J | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Iron | 0.40 | | 0.40 | 0.20 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Manganese | 1.7 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Nickel | 0.048 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |
| Zinc | 0.22 | J | 0.50 | 0.020 | mg/L | | 11/29/17 08:23 | 11/29/17 16:04 | 1 |

Method: 6010B - Metals (ICP) - SPLP East

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|-------------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | 0.20 | | 0.025 | 0.010 | mg/L | | 11/29/17 09:01 | 11/29/17 16:25 | 1 |

Method: 6020A - Metals (ICP/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/29/17 08:23 | 11/29/17 16:37 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/29/17 08:23 | 11/29/17 16:37 | 1 |

Method: 7470A - TCLP Mercury - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/29/17 15:15 | 11/30/17 10:07 | 1 |

Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.022 | B | 0.020 | 0.0068 | mg/Kg | ☼ | 11/27/17 14:00 | 11/28/17 09:56 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|------------|-----------|------|------|------|---|----------|----------------|---------|
| pH | 5.4 | | 0.20 | 0.20 | SU | | | 11/28/17 13:02 | 1 |

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Qualifiers

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Metals

| Qualifier | Qualifier Description |
|-----------|---|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F2 | MS/MSD RPD exceeds control limits |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

GC/MS VOA

Prep Batch: 411403

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 5035 | |

Analysis Batch: 411445

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 8260B | 411403 |
| MB 500-411445/6 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 500-411445/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 500-411445/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

GC/MS Semi VOA

Prep Batch: 411212

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 3541 | |
| MB 500-411212/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-411212/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| 500-137674-1 MS | 3160-32-07 | Total/NA | Solid | 3541 | |
| 500-137674-1 MSD | 3160-32-07 | Total/NA | Solid | 3541 | |

Analysis Batch: 411278

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 500-411212/1-A | Method Blank | Total/NA | Solid | 8270D | 411212 |
| LCS 500-411212/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 411212 |

Analysis Batch: 411454

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 8270D | 411212 |
| 500-137674-1 MS | 3160-32-07 | Total/NA | Solid | 8270D | 411212 |
| 500-137674-1 MSD | 3160-32-07 | Total/NA | Solid | 8270D | 411212 |

GC Semi VOA

Prep Batch: 411275

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 3541 | |
| MB 500-411275/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-411275/3-A | Lab Control Sample | Total/NA | Solid | 3541 | |

Analysis Batch: 411518

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| MB 500-411275/1-A | Method Blank | Total/NA | Solid | 8082A | 411275 |
| LCS 500-411275/3-A | Lab Control Sample | Total/NA | Solid | 8082A | 411275 |

Analysis Batch: 411995

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 8082A | 411275 |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Metals

Prep Batch: 411251

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 3050B | |
| MB 500-411251/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-411251/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-137674-1 MS | 3160-32-07 | Total/NA | Solid | 3050B | |
| 500-137674-1 MSD | 3160-32-07 | Total/NA | Solid | 3050B | |
| 500-137674-1 DU | 3160-32-07 | Total/NA | Solid | 3050B | |

Analysis Batch: 411309

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 6010B | 411251 |
| MB 500-411251/1-A | Method Blank | Total/NA | Solid | 6010B | 411251 |
| LCS 500-411251/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 411251 |
| 500-137674-1 MS | 3160-32-07 | Total/NA | Solid | 6010B | 411251 |
| 500-137674-1 MSD | 3160-32-07 | Total/NA | Solid | 6010B | 411251 |
| 500-137674-1 DU | 3160-32-07 | Total/NA | Solid | 6010B | 411251 |

Prep Batch: 411477

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 7471B | |
| MB 500-411477/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-411477/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |

Leach Batch: 411663

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | TCLP | Solid | 1311 | |
| LB 500-411663/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 500-411663/1-C | Method Blank | TCLP | Solid | 1311 | |

Leach Batch: 411674

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | SPLP East | Solid | 1312 | |
| LB 500-411674/1-B | Method Blank | SPLP East | Solid | 1312 | |

Analysis Batch: 411792

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 7471B | 411477 |
| MB 500-411477/12-A | Method Blank | Total/NA | Solid | 7471B | 411477 |
| LCS 500-411477/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 411477 |

Prep Batch: 411800

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | TCLP | Solid | 3010A | 411663 |
| LB 500-411663/1-B | Method Blank | TCLP | Solid | 3010A | 411663 |
| LCS 500-411800/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

Prep Batch: 411807

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | SPLP East | Solid | 3010A | 411674 |
| LB 500-411674/1-B | Method Blank | SPLP East | Solid | 3010A | 411674 |
| LCS 500-411807/2-A | Lab Control Sample | Total/NA | Solid | 3010A | |

TestAmerica Chicago

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Metals (Continued)

Prep Batch: 411892

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | TCLP | Solid | 7470A | 411663 |
| LB 500-411663/1-C | Method Blank | TCLP | Solid | 7470A | 411663 |
| MB 500-411892/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-411892/13-A | Lab Control Sample | Total/NA | Solid | 7470A | |

Analysis Batch: 411940

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | TCLP | Solid | 6010B | 411800 |
| LB 500-411663/1-B | Method Blank | TCLP | Solid | 6010B | 411800 |
| LCS 500-411800/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 411800 |

Analysis Batch: 411942

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | SPLP East | Solid | 6010B | 411807 |
| LB 500-411674/1-B | Method Blank | SPLP East | Solid | 6010B | 411807 |
| LCS 500-411807/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 411807 |

Analysis Batch: 411982

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | TCLP | Solid | 6020A | 411800 |
| LB 500-411663/1-B | Method Blank | TCLP | Solid | 6020A | 411800 |
| LCS 500-411800/2-A | Lab Control Sample | Total/NA | Solid | 6020A | 411800 |

Analysis Batch: 412012

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | TCLP | Solid | 7470A | 411892 |
| LB 500-411663/1-C | Method Blank | TCLP | Solid | 7470A | 411892 |
| MB 500-411892/12-A | Method Blank | Total/NA | Solid | 7470A | 411892 |
| LCS 500-411892/13-A | Lab Control Sample | Total/NA | Solid | 7470A | 411892 |

General Chemistry

Analysis Batch: 411344

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | Moisture | |

Analysis Batch: 411701

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 500-137674-1 | 3160-32-07 | Total/NA | Solid | 9045D | |

Surrogate Summary

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | BFB | DBFM | 12DCE | TOL |
|-------------------|------------------------|----------|----------|----------|----------|
| | | (75-131) | (75-126) | (70-134) | (75-124) |
| 500-137674-1 | 3160-32-07 | 103 | 103 | 103 | 92 |
| LCS 500-411445/4 | Lab Control Sample | 99 | 101 | 94 | 96 |
| LCSD 500-411445/5 | Lab Control Sample Dup | 101 | 102 | 98 | 95 |
| MB 500-411445/6 | Method Blank | 99 | 102 | 100 | 93 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
 DBFM = Dibromofluoromethane
 12DCE = 1,2-Dichloroethane-d4 (Surr)
 TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | FBP | 2FP | NBZ | PHL | TPH | TBP |
|--------------------|--------------------|----------|----------|----------|----------|----------|----------|
| | | (44-121) | (46-133) | (41-120) | (46-125) | (35-160) | (25-139) |
| 500-137674-1 | 3160-32-07 | 68 | 82 | 64 | 67 | 63 | 81 |
| 500-137674-1 MS | 3160-32-07 | 87 | 94 | 83 | 76 | 73 | 120 |
| 500-137674-1 MSD | 3160-32-07 | 76 | 86 | 72 | 70 | 69 | 105 |
| LCS 500-411212/2-A | Lab Control Sample | 79 | 111 | 72 | 93 | 76 | 82 |
| MB 500-411212/1-A | Method Blank | 78 | 107 | 63 | 89 | 78 | 69 |

Surrogate Legend

FBP = 2-Fluorobiphenyl
 2FP = 2-Fluorophenol
 NBZ = Nitrobenzene-d5
 PHL = Phenol-d5
 TPH = Terphenyl-d14
 TBP = 2,4,6-Tribromophenol

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID | Client Sample ID | TCX1 | DCB1 |
|--------------------|--------------------|----------|----------|
| | | (49-129) | (37-121) |
| 500-137674-1 | 3160-32-07 | 79 | 115 |
| LCS 500-411275/3-A | Lab Control Sample | 99 | 101 |
| MB 500-411275/1-A | Method Blank | 107 | 106 |

Surrogate Legend

TCX = Tetrachloro-m-xylene
 DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-411445/6

Matrix: Solid

Analysis Batch: 411445

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|--------|---------|-------|---|----------|----------------|---------|
| Acetone | <0.020 | | 0.020 | 0.0087 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Benzene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Bromodichloromethane | <0.0020 | | 0.0020 | 0.00041 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Bromoform | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Bromomethane | <0.0050 | | 0.0050 | 0.0019 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 2-Butanone (MEK) | <0.0050 | | 0.0050 | 0.0022 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Carbon disulfide | <0.0050 | | 0.0050 | 0.0010 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Carbon tetrachloride | <0.0020 | | 0.0020 | 0.00058 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Chlorobenzene | <0.0020 | | 0.0020 | 0.00074 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Chloroethane | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Chloroform | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Chloromethane | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/27/17 11:10 | 1 |
| cis-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00056 | mg/Kg | | | 11/27/17 11:10 | 1 |
| cis-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Dibromochloromethane | <0.0020 | | 0.0020 | 0.00065 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,1-Dichloroethane | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,2-Dichloroethane | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,1-Dichloroethene | <0.0020 | | 0.0020 | 0.00069 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,2-Dichloropropane | <0.0020 | | 0.0020 | 0.00052 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,3-Dichloropropene, Total | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Ethylbenzene | <0.0020 | | 0.0020 | 0.00096 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 2-Hexanone | <0.0050 | | 0.0050 | 0.0016 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Methylene Chloride | <0.0050 | | 0.0050 | 0.0020 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 4-Methyl-2-pentanone (MIBK) | <0.0050 | | 0.0050 | 0.0015 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Methyl tert-butyl ether | <0.0020 | | 0.0020 | 0.00059 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Styrene | <0.0020 | | 0.0020 | 0.00060 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,1,2,2-Tetrachloroethane | <0.0020 | | 0.0020 | 0.00064 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Tetrachloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Toluene | <0.0020 | | 0.0020 | 0.00051 | mg/Kg | | | 11/27/17 11:10 | 1 |
| trans-1,2-Dichloroethene | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/27/17 11:10 | 1 |
| trans-1,3-Dichloropropene | <0.0020 | | 0.0020 | 0.00070 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,1,1-Trichloroethane | <0.0020 | | 0.0020 | 0.00067 | mg/Kg | | | 11/27/17 11:10 | 1 |
| 1,1,2-Trichloroethane | <0.0020 | | 0.0020 | 0.00086 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Trichloroethene | <0.0020 | | 0.0020 | 0.00068 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Vinyl acetate | <0.0050 | | 0.0050 | 0.0017 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Vinyl chloride | <0.0020 | | 0.0020 | 0.00089 | mg/Kg | | | 11/27/17 11:10 | 1 |
| Xylenes, Total | <0.0040 | | 0.0040 | 0.00064 | mg/Kg | | | 11/27/17 11:10 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 99 | | 75 - 131 | | 11/27/17 11:10 | 1 |
| Dibromofluoromethane | 102 | | 75 - 126 | | 11/27/17 11:10 | 1 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | 70 - 134 | | 11/27/17 11:10 | 1 |
| Toluene-d8 (Surr) | 93 | | 75 - 124 | | 11/27/17 11:10 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-411445/4

Matrix: Solid

Analysis Batch: 411445

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Acetone | 0.0500 | 0.0457 | | mg/Kg | | 91 | 40 - 150 |
| Benzene | 0.0500 | 0.0516 | | mg/Kg | | 103 | 70 - 125 |
| Bromodichloromethane | 0.0500 | 0.0542 | | mg/Kg | | 108 | 67 - 129 |
| Bromoform | 0.0500 | 0.0480 | | mg/Kg | | 96 | 68 - 136 |
| Bromomethane | 0.0500 | 0.0573 | | mg/Kg | | 115 | 70 - 130 |
| 2-Butanone (MEK) | 0.0500 | 0.0309 | | mg/Kg | | 62 | 47 - 138 |
| Carbon disulfide | 0.0500 | 0.0513 | | mg/Kg | | 103 | 70 - 129 |
| Carbon tetrachloride | 0.0500 | 0.0581 | | mg/Kg | | 116 | 75 - 125 |
| Chlorobenzene | 0.0500 | 0.0502 | | mg/Kg | | 100 | 50 - 150 |
| Chloroethane | 0.0500 | 0.0488 | | mg/Kg | | 98 | 75 - 125 |
| Chloroform | 0.0500 | 0.0558 | | mg/Kg | | 112 | 57 - 135 |
| Chloromethane | 0.0500 | 0.0438 | | mg/Kg | | 88 | 70 - 125 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0536 | | mg/Kg | | 107 | 70 - 125 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0505 | | mg/Kg | | 101 | 70 - 125 |
| Dibromochloromethane | 0.0500 | 0.0537 | | mg/Kg | | 107 | 69 - 125 |
| 1,1-Dichloroethane | 0.0500 | 0.0482 | | mg/Kg | | 96 | 70 - 125 |
| 1,2-Dichloroethane | 0.0500 | 0.0542 | | mg/Kg | | 108 | 70 - 130 |
| 1,1-Dichloroethene | 0.0500 | 0.0541 | | mg/Kg | | 108 | 70 - 120 |
| 1,2-Dichloropropane | 0.0500 | 0.0458 | | mg/Kg | | 92 | 70 - 125 |
| Ethylbenzene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 61 - 136 |
| 2-Hexanone | 0.0500 | 0.0276 | | mg/Kg | | 55 | 48 - 146 |
| Methylene Chloride | 0.0500 | 0.0522 | | mg/Kg | | 104 | 70 - 126 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0285 | | mg/Kg | | 57 | 50 - 148 |
| Methyl tert-butyl ether | 0.0500 | 0.0562 | | mg/Kg | | 112 | 50 - 140 |
| Styrene | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0542 | | mg/Kg | | 108 | 70 - 122 |
| Tetrachloroethene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 70 - 124 |
| Toluene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 125 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0534 | | mg/Kg | | 107 | 70 - 125 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0502 | | mg/Kg | | 100 | 70 - 125 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0562 | | mg/Kg | | 112 | 70 - 128 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 |
| Trichloroethene | 0.0500 | 0.0548 | | mg/Kg | | 110 | 70 - 125 |
| Vinyl acetate | 0.0500 | 0.0321 | | mg/Kg | | 64 | 40 - 153 |
| Vinyl chloride | 0.0500 | 0.0518 | | mg/Kg | | 104 | 70 - 125 |
| Xylenes, Total | 0.100 | 0.0998 | | mg/Kg | | 100 | 53 - 147 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 99 | | 75 - 131 |
| Dibromofluoromethane | 101 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 70 - 134 |
| Toluene-d8 (Surr) | 96 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-411445/5

Matrix: Solid

Analysis Batch: 411445

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Acetone | 0.0500 | 0.0463 | | mg/Kg | | 93 | 40 - 150 | 1 | 30 |
| Benzene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 70 - 125 | 3 | 30 |
| Bromodichloromethane | 0.0500 | 0.0517 | | mg/Kg | | 103 | 67 - 129 | 5 | 30 |
| Bromoform | 0.0500 | 0.0494 | | mg/Kg | | 99 | 68 - 136 | 3 | 30 |
| Bromomethane | 0.0500 | 0.0550 | | mg/Kg | | 110 | 70 - 130 | 4 | 30 |
| 2-Butanone (MEK) | 0.0500 | 0.0300 | | mg/Kg | | 60 | 47 - 138 | 3 | 30 |
| Carbon disulfide | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 129 | 6 | 30 |
| Carbon tetrachloride | 0.0500 | 0.0562 | | mg/Kg | | 112 | 75 - 125 | 3 | 30 |
| Chlorobenzene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 50 - 150 | 3 | 30 |
| Chloroethane | 0.0500 | 0.0474 | | mg/Kg | | 95 | 75 - 125 | 3 | 30 |
| Chloroform | 0.0500 | 0.0537 | | mg/Kg | | 107 | 57 - 135 | 4 | 30 |
| Chloromethane | 0.0500 | 0.0419 | | mg/Kg | | 84 | 70 - 125 | 5 | 30 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 | 6 | 30 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 70 - 125 | 1 | 30 |
| Dibromochloromethane | 0.0500 | 0.0545 | | mg/Kg | | 109 | 69 - 125 | 2 | 30 |
| 1,1-Dichloroethane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 70 - 125 | 4 | 30 |
| 1,2-Dichloroethane | 0.0500 | 0.0540 | | mg/Kg | | 108 | 70 - 130 | 0 | 30 |
| 1,1-Dichloroethene | 0.0500 | 0.0521 | | mg/Kg | | 104 | 70 - 120 | 4 | 30 |
| 1,2-Dichloropropane | 0.0500 | 0.0441 | | mg/Kg | | 88 | 70 - 125 | 4 | 30 |
| Ethylbenzene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 61 - 136 | 2 | 30 |
| 2-Hexanone | 0.0500 | 0.0300 | | mg/Kg | | 60 | 48 - 146 | 8 | 30 |
| Methylene Chloride | 0.0500 | 0.0502 | | mg/Kg | | 100 | 70 - 126 | 4 | 30 |
| 4-Methyl-2-pentanone (MIBK) | 0.0500 | 0.0309 | | mg/Kg | | 62 | 50 - 148 | 8 | 30 |
| Methyl tert-butyl ether | 0.0500 | 0.0565 | | mg/Kg | | 113 | 50 - 140 | 0 | 30 |
| Styrene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 70 - 125 | 2 | 30 |
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0563 | | mg/Kg | | 113 | 70 - 122 | 4 | 30 |
| Tetrachloroethene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 70 - 124 | 2 | 30 |
| Toluene | 0.0500 | 0.0467 | | mg/Kg | | 93 | 70 - 125 | 4 | 30 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 70 - 125 | 6 | 30 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0507 | | mg/Kg | | 101 | 70 - 125 | 1 | 30 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0548 | | mg/Kg | | 110 | 70 - 128 | 3 | 30 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0510 | | mg/Kg | | 102 | 70 - 125 | 2 | 30 |
| Trichloroethene | 0.0500 | 0.0512 | | mg/Kg | | 102 | 70 - 125 | 7 | 30 |
| Vinyl acetate | 0.0500 | 0.0350 | | mg/Kg | | 70 | 40 - 153 | 9 | 30 |
| Vinyl chloride | 0.0500 | 0.0483 | | mg/Kg | | 97 | 70 - 125 | 7 | 30 |
| Xylenes, Total | 0.100 | 0.0978 | | mg/Kg | | 98 | 53 - 147 | 2 | 30 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | LCSD Limits |
|------------------------------|----------------|----------------|-------------|
| 4-Bromofluorobenzene (Surr) | 101 | | 75 - 131 |
| Dibromofluoromethane | 102 | | 75 - 126 |
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 70 - 134 |
| Toluene-d8 (Surr) | 95 | | 75 - 124 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-411212/1-A

Matrix: Solid

Analysis Batch: 411278

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 411212

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Acenaphthene | <0.033 | | 0.033 | 0.0060 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Acenaphthylene | <0.033 | | 0.033 | 0.0044 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Anthracene | <0.033 | | 0.033 | 0.0056 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Benzo[a]anthracene | <0.033 | | 0.033 | 0.0045 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Benzo[a]pyrene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Benzo[b]fluoranthene | <0.033 | | 0.033 | 0.0072 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Benzo[g,h,i]perylene | <0.033 | | 0.033 | 0.011 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Benzo[k]fluoranthene | <0.033 | | 0.033 | 0.0098 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Bis(2-chloroethoxy)methane | <0.17 | | 0.17 | 0.034 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Bis(2-chloroethyl)ether | <0.17 | | 0.17 | 0.050 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Bis(2-ethylhexyl) phthalate | <0.17 | | 0.17 | 0.061 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4-Bromophenyl phenyl ether | <0.17 | | 0.17 | 0.044 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Butyl benzyl phthalate | <0.17 | | 0.17 | 0.063 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Carbazole | <0.17 | | 0.17 | 0.083 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4-Chloroaniline | <0.67 | | 0.67 | 0.16 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4-Chloro-3-methylphenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2-Chloronaphthalene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2-Chlorophenol | <0.17 | | 0.17 | 0.057 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4-Chlorophenyl phenyl ether | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Chrysene | <0.033 | | 0.033 | 0.0091 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Dibenz(a,h)anthracene | <0.033 | | 0.033 | 0.0064 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Dibenzofuran | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 1,2-Dichlorobenzene | <0.17 | | 0.17 | 0.040 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 1,3-Dichlorobenzene | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 1,4-Dichlorobenzene | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 3,3'-Dichlorobenzidine | <0.17 | | 0.17 | 0.047 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4-Dichlorophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Diethyl phthalate | <0.17 | | 0.17 | 0.056 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4-Dimethylphenol | <0.33 | | 0.33 | 0.13 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Dimethyl phthalate | <0.17 | | 0.17 | 0.043 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Di-n-butyl phthalate | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4,6-Dinitro-2-methylphenol | <0.67 | | 0.67 | 0.27 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4-Dinitrophenol | <0.67 | | 0.67 | 0.59 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4-Dinitrotoluene | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,6-Dinitrotoluene | <0.17 | | 0.17 | 0.065 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Di-n-octyl phthalate | <0.17 | | 0.17 | 0.054 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Fluoranthene | <0.033 | | 0.033 | 0.0062 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Fluorene | <0.033 | | 0.033 | 0.0047 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Hexachlorobenzene | <0.067 | | 0.067 | 0.0077 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Hexachlorobutadiene | <0.17 | | 0.17 | 0.052 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Hexachlorocyclopentadiene | <0.67 | | 0.67 | 0.19 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Hexachloroethane | <0.17 | | 0.17 | 0.051 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Indeno[1,2,3-cd]pyrene | <0.033 | | 0.033 | 0.0086 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Isophorone | <0.17 | | 0.17 | 0.037 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2-Methylnaphthalene | <0.067 | | 0.067 | 0.0061 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2-Methylphenol | <0.17 | | 0.17 | 0.053 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 3 & 4 Methylphenol | <0.17 | | 0.17 | 0.055 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Naphthalene | <0.033 | | 0.033 | 0.0051 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-411212/1-A
Matrix: Solid
Analysis Batch: 411278

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| 2-Nitroaniline | <0.17 | | 0.17 | 0.045 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 3-Nitroaniline | <0.33 | | 0.33 | 0.10 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4-Nitroaniline | <0.33 | | 0.33 | 0.14 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Nitrobenzene | <0.033 | | 0.033 | 0.0083 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2-Nitrophenol | <0.33 | | 0.33 | 0.079 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 4-Nitrophenol | <0.67 | | 0.67 | 0.32 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| N-Nitrosodi-n-propylamine | <0.067 | | 0.067 | 0.041 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| N-Nitrosodiphenylamine | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,2'-oxybis[1-chloropropane] | <0.17 | | 0.17 | 0.039 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Pentachlorophenol | <0.67 | | 0.67 | 0.53 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Phenanthrene | <0.033 | | 0.033 | 0.0046 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Phenol | <0.17 | | 0.17 | 0.074 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Pyrene | <0.033 | | 0.033 | 0.0066 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 1,2,4-Trichlorobenzene | <0.17 | | 0.17 | 0.036 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4,5-Trichlorophenol | <0.33 | | 0.33 | 0.076 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4,6-Trichlorophenol | <0.33 | | 0.33 | 0.11 | mg/Kg | | 11/22/17 16:19 | 11/24/17 16:14 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 78 | | 44 - 121 | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2-Fluorophenol | 107 | | 46 - 133 | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Nitrobenzene-d5 | 63 | | 41 - 120 | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Phenol-d5 | 89 | | 46 - 125 | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| Terphenyl-d14 | 78 | | 35 - 160 | 11/22/17 16:19 | 11/24/17 16:14 | 1 |
| 2,4,6-Tribromophenol | 69 | | 25 - 139 | 11/22/17 16:19 | 11/24/17 16:14 | 1 |

Lab Sample ID: LCS 500-411212/2-A
Matrix: Solid
Analysis Batch: 411278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|-------------|------------|---------------|-------|---|------|----------|
| Acenaphthene | 1.33 | 1.07 | | mg/Kg | | 80 | 58 - 110 |
| Acenaphthylene | 1.33 | 1.01 | | mg/Kg | | 75 | 60 - 110 |
| Anthracene | 1.33 | 1.07 | | mg/Kg | | 81 | 63 - 110 |
| Benzo[a]anthracene | 1.33 | 0.903 | | mg/Kg | | 68 | 63 - 110 |
| Benzo[a]pyrene | 1.33 | 1.14 | | mg/Kg | | 86 | 61 - 120 |
| Benzo[b]fluoranthene | 1.33 | 1.08 | | mg/Kg | | 81 | 62 - 120 |
| Benzo[g,h,i]perylene | 1.33 | 1.11 | | mg/Kg | | 83 | 64 - 120 |
| Benzo[k]fluoranthene | 1.33 | 1.12 | | mg/Kg | | 84 | 65 - 120 |
| Bis(2-chloroethoxy)methane | 1.33 | 0.980 | | mg/Kg | | 73 | 60 - 112 |
| Bis(2-chloroethyl)ether | 1.33 | 0.936 | | mg/Kg | | 70 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | 1.33 | 1.05 | | mg/Kg | | 79 | 63 - 118 |
| 4-Bromophenyl phenyl ether | 1.33 | 0.978 | | mg/Kg | | 73 | 63 - 110 |
| Butyl benzyl phthalate | 1.33 | 1.06 | | mg/Kg | | 80 | 61 - 116 |
| Carbazole | 1.33 | 1.39 | | mg/Kg | | 104 | 59 - 158 |
| 4-Chloroaniline | 1.33 | 1.04 | | mg/Kg | | 78 | 30 - 150 |
| 4-Chloro-3-methylphenol | 1.33 | 0.964 | | mg/Kg | | 72 | 61 - 114 |
| 2-Chloronaphthalene | 1.33 | 1.05 | | mg/Kg | | 79 | 64 - 110 |
| 2-Chlorophenol | 1.33 | 1.09 | | mg/Kg | | 81 | 64 - 110 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-411212/2-A
Matrix: Solid
Analysis Batch: 411278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|------------------------------|-------------|------------|---------------|-------|---|------|----------|
| 4-Chlorophenyl phenyl ether | 1.33 | 0.967 | | mg/Kg | | 73 | 63 - 110 |
| Chrysene | 1.33 | 0.922 | | mg/Kg | | 69 | 63 - 120 |
| Dibenz(a,h)anthracene | 1.33 | 1.18 | | mg/Kg | | 88 | 64 - 119 |
| Dibenzofuran | 1.33 | 1.01 | | mg/Kg | | 75 | 64 - 110 |
| 1,2-Dichlorobenzene | 1.33 | 0.971 | | mg/Kg | | 73 | 62 - 110 |
| 1,3-Dichlorobenzene | 1.33 | 0.952 | | mg/Kg | | 71 | 60 - 110 |
| 1,4-Dichlorobenzene | 1.33 | 0.957 | | mg/Kg | | 72 | 61 - 110 |
| 3,3'-Dichlorobenzidine | 1.33 | 0.889 | | mg/Kg | | 67 | 49 - 112 |
| 2,4-Dichlorophenol | 1.33 | 1.01 | | mg/Kg | | 76 | 58 - 120 |
| Diethyl phthalate | 1.33 | 1.04 | | mg/Kg | | 78 | 58 - 120 |
| 2,4-Dimethylphenol | 1.33 | 1.01 | | mg/Kg | | 76 | 60 - 110 |
| Dimethyl phthalate | 1.33 | 1.08 | | mg/Kg | | 81 | 64 - 110 |
| Di-n-butyl phthalate | 1.33 | 1.14 | | mg/Kg | | 86 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | 2.67 | 1.08 | | mg/Kg | | 41 | 10 - 110 |
| 2,4-Dinitrophenol | 2.67 | 0.659 | J | mg/Kg | | 25 | 10 - 100 |
| 2,4-Dinitrotoluene | 1.33 | 1.19 | | mg/Kg | | 89 | 62 - 117 |
| 2,6-Dinitrotoluene | 1.33 | 1.03 | | mg/Kg | | 77 | 67 - 120 |
| Di-n-octyl phthalate | 1.33 | 1.22 | | mg/Kg | | 92 | 63 - 119 |
| Fluoranthene | 1.33 | 1.10 | | mg/Kg | | 83 | 62 - 120 |
| Fluorene | 1.33 | 1.01 | | mg/Kg | | 76 | 62 - 120 |
| Hexachlorobenzene | 1.33 | 1.01 | | mg/Kg | | 76 | 55 - 117 |
| Hexachlorobutadiene | 1.33 | 0.787 | | mg/Kg | | 59 | 56 - 120 |
| Hexachlorocyclopentadiene | 1.33 | 0.690 | | mg/Kg | | 52 | 10 - 106 |
| Hexachloroethane | 1.33 | 0.942 | | mg/Kg | | 71 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | 1.33 | 1.21 | | mg/Kg | | 91 | 57 - 127 |
| Isophorone | 1.33 | 0.946 | | mg/Kg | | 71 | 55 - 110 |
| 2-Methylnaphthalene | 1.33 | 0.961 | | mg/Kg | | 72 | 62 - 110 |
| 2-Methylphenol | 1.33 | 1.07 | | mg/Kg | | 80 | 60 - 120 |
| 3 & 4 Methylphenol | 1.33 | 1.05 | | mg/Kg | | 78 | 57 - 120 |
| Naphthalene | 1.33 | 1.01 | | mg/Kg | | 75 | 63 - 110 |
| 2-Nitroaniline | 1.33 | 0.995 | | mg/Kg | | 75 | 57 - 124 |
| 3-Nitroaniline | 1.33 | 1.16 | | mg/Kg | | 87 | 40 - 122 |
| 4-Nitroaniline | 1.33 | 1.70 | | mg/Kg | | 127 | 60 - 160 |
| Nitrobenzene | 1.33 | 0.957 | | mg/Kg | | 72 | 60 - 116 |
| 2-Nitrophenol | 1.33 | 1.06 | | mg/Kg | | 80 | 60 - 120 |
| 4-Nitrophenol | 2.67 | 1.78 | | mg/Kg | | 67 | 30 - 122 |
| N-Nitrosodi-n-propylamine | 1.33 | 0.946 | | mg/Kg | | 71 | 56 - 118 |
| N-Nitrosodiphenylamine | 1.33 | 1.10 | | mg/Kg | | 82 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | 1.33 | 0.725 | | mg/Kg | | 54 | 40 - 124 |
| Pentachlorophenol | 2.67 | 1.45 | | mg/Kg | | 54 | 13 - 112 |
| Phenanthrene | 1.33 | 1.06 | | mg/Kg | | 80 | 62 - 120 |
| Phenol | 1.33 | 1.11 | | mg/Kg | | 83 | 56 - 122 |
| Pyrene | 1.33 | 0.973 | | mg/Kg | | 73 | 63 - 120 |
| 1,2,4-Trichlorobenzene | 1.33 | 0.956 | | mg/Kg | | 72 | 62 - 110 |
| 2,4,5-Trichlorophenol | 1.33 | 0.971 | | mg/Kg | | 73 | 50 - 120 |
| 2,4,6-Trichlorophenol | 1.33 | 0.946 | | mg/Kg | | 71 | 57 - 120 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-411212/2-A
Matrix: Solid
Analysis Batch: 411278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411212

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 79 | | 44 - 121 |
| 2-Fluorophenol | 111 | | 46 - 133 |
| Nitrobenzene-d5 | 72 | | 41 - 120 |
| Phenol-d5 | 93 | | 46 - 125 |
| Terphenyl-d14 | 76 | | 35 - 160 |
| 2,4,6-Tribromophenol | 82 | | 25 - 139 |

Lab Sample ID: 500-137674-1 MS
Matrix: Solid
Analysis Batch: 411454

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Acenaphthene | <0.040 | | 1.62 | 1.20 | | mg/Kg | ☼ | 74 | 58 - 110 |
| Acenaphthylene | <0.040 | | 1.62 | 1.22 | | mg/Kg | ☼ | 75 | 60 - 110 |
| Anthracene | <0.040 | | 1.62 | 1.42 | | mg/Kg | ☼ | 88 | 63 - 110 |
| Benzo[a]anthracene | 0.0054 | J | 1.62 | 1.25 | | mg/Kg | ☼ | 77 | 63 - 110 |
| Benzo[a]pyrene | <0.040 | | 1.62 | 1.55 | | mg/Kg | ☼ | 96 | 61 - 120 |
| Benzo[b]fluoranthene | <0.040 | | 1.62 | 1.68 | | mg/Kg | ☼ | 104 | 62 - 120 |
| Benzo[g,h,i]perylene | <0.040 | F1 | 1.62 | 1.11 | | mg/Kg | ☼ | 69 | 64 - 120 |
| Benzo[k]fluoranthene | <0.040 | | 1.62 | 1.73 | | mg/Kg | ☼ | 107 | 65 - 120 |
| Bis(2-chloroethoxy)methane | <0.20 | | 1.62 | 1.22 | | mg/Kg | ☼ | 75 | 60 - 112 |
| Bis(2-chloroethyl)ether | <0.20 | F1 F2 | 1.62 | 0.880 | F1 | mg/Kg | ☼ | 54 | 55 - 111 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 1.62 | 1.20 | | mg/Kg | ☼ | 74 | 63 - 118 |
| 4-Bromophenyl phenyl ether | <0.20 | | 1.62 | 1.48 | | mg/Kg | ☼ | 91 | 63 - 110 |
| Butyl benzyl phthalate | <0.20 | | 1.62 | 1.12 | | mg/Kg | ☼ | 69 | 61 - 116 |
| Carbazole | <0.20 | | 1.62 | 1.52 | | mg/Kg | ☼ | 94 | 59 - 158 |
| 4-Chloroaniline | <0.81 | | 1.62 | 0.949 | | mg/Kg | ☼ | 59 | 30 - 150 |
| 4-Chloro-3-methylphenol | <0.40 | | 1.62 | 1.47 | | mg/Kg | ☼ | 91 | 61 - 114 |
| 2-Chloronaphthalene | <0.20 | | 1.62 | 1.32 | | mg/Kg | ☼ | 82 | 64 - 110 |
| 2-Chlorophenol | <0.20 | | 1.62 | 1.31 | | mg/Kg | ☼ | 81 | 64 - 110 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 1.62 | 1.43 | | mg/Kg | ☼ | 88 | 63 - 110 |
| Chrysene | <0.040 | | 1.62 | 1.27 | | mg/Kg | ☼ | 79 | 63 - 120 |
| Dibenz(a,h)anthracene | <0.040 | | 1.62 | 1.30 | | mg/Kg | ☼ | 81 | 64 - 119 |
| Dibenzofuran | <0.20 | | 1.62 | 1.41 | | mg/Kg | ☼ | 87 | 64 - 110 |
| 1,2-Dichlorobenzene | <0.20 | F1 | 1.62 | 0.977 | F1 | mg/Kg | ☼ | 60 | 62 - 110 |
| 1,3-Dichlorobenzene | <0.20 | F1 | 1.62 | 0.940 | F1 | mg/Kg | ☼ | 58 | 60 - 110 |
| 1,4-Dichlorobenzene | <0.20 | F1 | 1.62 | 0.958 | F1 | mg/Kg | ☼ | 59 | 61 - 110 |
| 3,3'-Dichlorobenzidine | <0.20 | F1 | 1.62 | 0.460 | F1 | mg/Kg | ☼ | 28 | 49 - 112 |
| 2,4-Dichlorophenol | <0.40 | | 1.62 | 1.43 | | mg/Kg | ☼ | 88 | 58 - 120 |
| Diethyl phthalate | <0.20 | | 1.62 | 1.58 | | mg/Kg | ☼ | 98 | 58 - 120 |
| 2,4-Dimethylphenol | <0.40 | | 1.62 | 1.26 | | mg/Kg | ☼ | 78 | 60 - 110 |
| Dimethyl phthalate | <0.20 | | 1.62 | 1.41 | | mg/Kg | ☼ | 87 | 64 - 110 |
| Di-n-butyl phthalate | <0.20 | | 1.62 | 1.41 | | mg/Kg | ☼ | 87 | 65 - 120 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 3.23 | 1.46 | | mg/Kg | ☼ | 45 | 10 - 110 |
| 2,4-Dinitrophenol | <0.81 | F2 | 3.23 | 1.36 | | mg/Kg | ☼ | 42 | 10 - 100 |
| 2,4-Dinitrotoluene | <0.20 | | 1.62 | 1.51 | | mg/Kg | ☼ | 93 | 62 - 117 |
| 2,6-Dinitrotoluene | <0.20 | | 1.62 | 1.49 | | mg/Kg | ☼ | 92 | 67 - 120 |
| Di-n-octyl phthalate | <0.20 | | 1.62 | 1.56 | | mg/Kg | ☼ | 97 | 63 - 119 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-137674-1 MS
Matrix: Solid
Analysis Batch: 411454

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | Sample | Sample | Spike | MS | MS | Unit | D | %Rec | Limits |
|------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|
| | Result | Qualifier | Added | Result | Qualifier | | | | |
| Fluoranthene | <0.040 | | 1.62 | 1.38 | | mg/Kg | ☼ | 85 | 62 - 120 |
| Fluorene | <0.040 | | 1.62 | 1.43 | | mg/Kg | ☼ | 89 | 62 - 120 |
| Hexachlorobenzene | <0.081 | | 1.62 | 1.70 | | mg/Kg | ☼ | 105 | 55 - 117 |
| Hexachlorobutadiene | <0.20 | | 1.62 | 1.25 | | mg/Kg | ☼ | 78 | 56 - 120 |
| Hexachlorocyclopentadiene | <0.81 | | 1.62 | 0.309 | J | mg/Kg | ☼ | 19 | 10 - 106 |
| Hexachloroethane | <0.20 | F1 | 1.62 | 0.912 | F1 | mg/Kg | ☼ | 56 | 61 - 110 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 1.62 | 1.24 | | mg/Kg | ☼ | 77 | 57 - 127 |
| Isophorone | <0.20 | | 1.62 | 1.15 | | mg/Kg | ☼ | 71 | 55 - 110 |
| 2-Methylnaphthalene | 0.021 | J | 1.62 | 1.25 | | mg/Kg | ☼ | 76 | 62 - 110 |
| 2-Methylphenol | <0.20 | | 1.62 | 1.33 | | mg/Kg | ☼ | 82 | 60 - 120 |
| 3 & 4 Methylphenol | <0.20 | | 1.62 | 1.25 | | mg/Kg | ☼ | 77 | 57 - 120 |
| Naphthalene | 0.0094 | J | 1.62 | 1.19 | | mg/Kg | ☼ | 73 | 63 - 110 |
| 2-Nitroaniline | <0.20 | | 1.62 | 1.45 | | mg/Kg | ☼ | 90 | 57 - 124 |
| 3-Nitroaniline | <0.40 | | 1.62 | 1.30 | | mg/Kg | ☼ | 80 | 40 - 122 |
| 4-Nitroaniline | <0.40 | | 1.62 | 1.59 | | mg/Kg | ☼ | 99 | 60 - 160 |
| Nitrobenzene | <0.040 | | 1.62 | 1.41 | | mg/Kg | ☼ | 87 | 60 - 116 |
| 2-Nitrophenol | <0.40 | | 1.62 | 1.23 | | mg/Kg | ☼ | 76 | 60 - 120 |
| 4-Nitrophenol | <0.81 | | 3.23 | 2.59 | | mg/Kg | ☼ | 80 | 30 - 122 |
| N-Nitrosodi-n-propylamine | <0.081 | | 1.62 | 1.24 | | mg/Kg | ☼ | 76 | 56 - 118 |
| N-Nitrosodiphenylamine | <0.20 | | 1.62 | 1.39 | | mg/Kg | ☼ | 86 | 65 - 112 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | F1 | 1.62 | 0.638 | F1 | mg/Kg | ☼ | 39 | 40 - 124 |
| Pentachlorophenol | <0.81 | | 3.23 | 1.61 | | mg/Kg | ☼ | 50 | 13 - 112 |
| Phenanthrene | 0.027 | J | 1.62 | 1.49 | | mg/Kg | ☼ | 91 | 62 - 120 |
| Phenol | <0.20 | | 1.62 | 1.33 | | mg/Kg | ☼ | 83 | 56 - 122 |
| Pyrene | <0.040 | | 1.62 | 1.11 | | mg/Kg | ☼ | 69 | 63 - 120 |
| 1,2,4-Trichlorobenzene | <0.20 | | 1.62 | 1.22 | | mg/Kg | ☼ | 76 | 62 - 110 |
| 2,4,5-Trichlorophenol | <0.40 | | 1.62 | 1.45 | | mg/Kg | ☼ | 90 | 50 - 120 |
| 2,4,6-Trichlorophenol | <0.40 | | 1.62 | 1.52 | | mg/Kg | ☼ | 94 | 57 - 120 |

| Surrogate | MS MS | | Limits |
|----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 2-Fluorobiphenyl | 87 | | 44 - 121 |
| 2-Fluorophenol | 94 | | 46 - 133 |
| Nitrobenzene-d5 | 83 | | 41 - 120 |
| Phenol-d5 | 76 | | 46 - 125 |
| Terphenyl-d14 | 73 | | 35 - 160 |
| 2,4,6-Tribromophenol | 120 | | 25 - 139 |

Lab Sample ID: 500-137674-1 MSD
Matrix: Solid
Analysis Batch: 411454

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | Sample | Sample | Spike | MSD | MSD | Unit | D | %Rec | Limits | RPD | |
|----------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | Qualifier | Added | Result | Qualifier | | | | | RPD | Limit |
| Acenaphthene | <0.040 | | 1.61 | 1.06 | | mg/Kg | ☼ | 66 | 58 - 110 | 13 | 30 |
| Acenaphthylene | <0.040 | | 1.61 | 1.12 | | mg/Kg | ☼ | 70 | 60 - 110 | 8 | 30 |
| Anthracene | <0.040 | | 1.61 | 1.30 | | mg/Kg | ☼ | 80 | 63 - 110 | 9 | 30 |
| Benzo[a]anthracene | 0.0054 | J | 1.61 | 1.11 | | mg/Kg | ☼ | 68 | 63 - 110 | 12 | 30 |
| Benzo[a]pyrene | <0.040 | | 1.61 | 1.27 | | mg/Kg | ☼ | 79 | 61 - 120 | 20 | 30 |
| Benzo[b]fluoranthene | <0.040 | | 1.61 | 1.55 | | mg/Kg | ☼ | 96 | 62 - 120 | 8 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-137674-1 MSD

Matrix: Solid

Analysis Batch: 411454

Client Sample ID: 3160-32-07

Prep Type: Total/NA

Prep Batch: 411212

| Analyte | Sample | Sample Qualifier | Spike Added | MSD | MSD | Unit | D | %Rec | %Rec. | RPD | Limit |
|-----------------------------|--------|------------------|-------------|--------|-----------|-------|---|------|----------|-----|-------|
| | Result | | | Result | Qualifier | | | | Limits | | |
| Benzo[g,h,i]perylene | <0.040 | F1 | 1.61 | 0.990 | F1 | mg/Kg | ☼ | 61 | 64 - 120 | 12 | 30 |
| Benzo[k]fluoranthene | <0.040 | | 1.61 | 1.41 | | mg/Kg | ☼ | 87 | 65 - 120 | 21 | 30 |
| Bis(2-chloroethoxy)methane | <0.20 | | 1.61 | 1.10 | | mg/Kg | ☼ | 68 | 60 - 112 | 11 | 30 |
| Bis(2-chloroethyl)ether | <0.20 | F1 F2 | 1.61 | 0.645 | F1 F2 | mg/Kg | ☼ | 40 | 55 - 111 | 31 | 30 |
| Bis(2-ethylhexyl) phthalate | <0.20 | | 1.61 | 1.03 | | mg/Kg | ☼ | 64 | 63 - 118 | 16 | 30 |
| 4-Bromophenyl phenyl ether | <0.20 | | 1.61 | 1.36 | | mg/Kg | ☼ | 84 | 63 - 110 | 8 | 30 |
| Butyl benzyl phthalate | <0.20 | | 1.61 | 1.02 | | mg/Kg | ☼ | 63 | 61 - 116 | 10 | 30 |
| Carbazole | <0.20 | | 1.61 | 1.33 | | mg/Kg | ☼ | 83 | 59 - 158 | 13 | 30 |
| 4-Chloroaniline | <0.81 | | 1.61 | 0.875 | | mg/Kg | ☼ | 54 | 30 - 150 | 8 | 30 |
| 4-Chloro-3-methylphenol | <0.40 | | 1.61 | 1.28 | | mg/Kg | ☼ | 79 | 61 - 114 | 13 | 30 |
| 2-Chloronaphthalene | <0.20 | | 1.61 | 1.19 | | mg/Kg | ☼ | 73 | 64 - 110 | 11 | 30 |
| 2-Chlorophenol | <0.20 | | 1.61 | 1.19 | | mg/Kg | ☼ | 74 | 64 - 110 | 10 | 30 |
| 4-Chlorophenyl phenyl ether | <0.20 | | 1.61 | 1.27 | | mg/Kg | ☼ | 79 | 63 - 110 | 12 | 30 |
| Chrysene | <0.040 | | 1.61 | 1.12 | | mg/Kg | ☼ | 69 | 63 - 120 | 13 | 30 |
| Dibenz(a,h)anthracene | <0.040 | | 1.61 | 1.15 | | mg/Kg | ☼ | 71 | 64 - 119 | 12 | 30 |
| Dibenzofuran | <0.20 | | 1.61 | 1.23 | | mg/Kg | ☼ | 76 | 64 - 110 | 13 | 30 |
| 1,2-Dichlorobenzene | <0.20 | F1 | 1.61 | 0.875 | F1 | mg/Kg | ☼ | 54 | 62 - 110 | 11 | 30 |
| 1,3-Dichlorobenzene | <0.20 | F1 | 1.61 | 0.847 | F1 | mg/Kg | ☼ | 52 | 60 - 110 | 10 | 30 |
| 1,4-Dichlorobenzene | <0.20 | F1 | 1.61 | 0.834 | F1 | mg/Kg | ☼ | 52 | 61 - 110 | 14 | 30 |
| 3,3'-Dichlorobenzidine | <0.20 | F1 | 1.61 | 0.525 | F1 | mg/Kg | ☼ | 32 | 49 - 112 | 13 | 30 |
| 2,4-Dichlorophenol | <0.40 | | 1.61 | 1.25 | | mg/Kg | ☼ | 77 | 58 - 120 | 13 | 30 |
| Diethyl phthalate | <0.20 | | 1.61 | 1.36 | | mg/Kg | ☼ | 84 | 58 - 120 | 15 | 30 |
| 2,4-Dimethylphenol | <0.40 | | 1.61 | 1.17 | | mg/Kg | ☼ | 73 | 60 - 110 | 7 | 30 |
| Dimethyl phthalate | <0.20 | | 1.61 | 1.23 | | mg/Kg | ☼ | 76 | 64 - 110 | 13 | 30 |
| Di-n-butyl phthalate | <0.20 | | 1.61 | 1.25 | | mg/Kg | ☼ | 77 | 65 - 120 | 12 | 30 |
| 4,6-Dinitro-2-methylphenol | <0.81 | | 3.23 | 1.22 | | mg/Kg | ☼ | 38 | 10 - 110 | 19 | 30 |
| 2,4-Dinitrophenol | <0.81 | F2 | 3.23 | 0.974 | F2 | mg/Kg | ☼ | 30 | 10 - 100 | 33 | 30 |
| 2,4-Dinitrotoluene | <0.20 | | 1.61 | 1.34 | | mg/Kg | ☼ | 83 | 62 - 117 | 12 | 30 |
| 2,6-Dinitrotoluene | <0.20 | | 1.61 | 1.31 | | mg/Kg | ☼ | 81 | 67 - 120 | 13 | 30 |
| Di-n-octyl phthalate | <0.20 | | 1.61 | 1.35 | | mg/Kg | ☼ | 84 | 63 - 119 | 15 | 30 |
| Fluoranthene | <0.040 | | 1.61 | 1.31 | | mg/Kg | ☼ | 81 | 62 - 120 | 5 | 30 |
| Fluorene | <0.040 | | 1.61 | 1.27 | | mg/Kg | ☼ | 78 | 62 - 120 | 12 | 30 |
| Hexachlorobenzene | <0.081 | | 1.61 | 1.51 | | mg/Kg | ☼ | 94 | 55 - 117 | 11 | 30 |
| Hexachlorobutadiene | <0.20 | | 1.61 | 1.11 | | mg/Kg | ☼ | 69 | 56 - 120 | 12 | 30 |
| Hexachlorocyclopentadiene | <0.81 | | 1.61 | 0.231 | J | mg/Kg | ☼ | 14 | 10 - 106 | 29 | 30 |
| Hexachloroethane | <0.20 | F1 | 1.61 | 0.783 | F1 | mg/Kg | ☼ | 49 | 61 - 110 | 15 | 30 |
| Indeno[1,2,3-cd]pyrene | <0.040 | | 1.61 | 1.09 | | mg/Kg | ☼ | 67 | 57 - 127 | 13 | 30 |
| Isophorone | <0.20 | | 1.61 | 1.08 | | mg/Kg | ☼ | 67 | 55 - 110 | 7 | 30 |
| 2-Methylnaphthalene | 0.021 | J | 1.61 | 1.06 | | mg/Kg | ☼ | 64 | 62 - 110 | 17 | 30 |
| 2-Methylphenol | <0.20 | | 1.61 | 1.14 | | mg/Kg | ☼ | 70 | 60 - 120 | 16 | 30 |
| 3 & 4 Methylphenol | <0.20 | | 1.61 | 1.15 | | mg/Kg | ☼ | 71 | 57 - 120 | 8 | 30 |
| Naphthalene | 0.0094 | J | 1.61 | 1.04 | | mg/Kg | ☼ | 64 | 63 - 110 | 14 | 30 |
| 2-Nitroaniline | <0.20 | | 1.61 | 1.29 | | mg/Kg | ☼ | 80 | 57 - 124 | 12 | 30 |
| 3-Nitroaniline | <0.40 | | 1.61 | 1.18 | | mg/Kg | ☼ | 73 | 40 - 122 | 9 | 30 |
| 4-Nitroaniline | <0.40 | | 1.61 | 1.39 | | mg/Kg | ☼ | 86 | 60 - 160 | 14 | 30 |
| Nitrobenzene | <0.040 | | 1.61 | 1.18 | | mg/Kg | ☼ | 73 | 60 - 116 | 17 | 30 |
| 2-Nitrophenol | <0.40 | | 1.61 | 1.16 | | mg/Kg | ☼ | 72 | 60 - 120 | 6 | 30 |
| 4-Nitrophenol | <0.81 | | 3.23 | 2.06 | | mg/Kg | ☼ | 64 | 30 - 122 | 23 | 30 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-137674-1 MSD
Matrix: Solid
Analysis Batch: 411454

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411212

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| N-Nitrosodi-n-propylamine | <0.081 | | 1.61 | 1.12 | | mg/Kg | ☼ | 70 | 56 - 118 | 10 | 30 |
| N-Nitrosodiphenylamine | <0.20 | | 1.61 | 1.23 | | mg/Kg | ☼ | 76 | 65 - 112 | 13 | 30 |
| 2,2'-oxybis[1-chloropropane] | <0.20 | F1 | 1.61 | 0.565 | F1 | mg/Kg | ☼ | 35 | 40 - 124 | 12 | 30 |
| Pentachlorophenol | <0.81 | | 3.23 | 1.40 | | mg/Kg | ☼ | 43 | 13 - 112 | 14 | 30 |
| Phenanthrene | 0.027 | J | 1.61 | 1.28 | | mg/Kg | ☼ | 77 | 62 - 120 | 16 | 30 |
| Phenol | <0.20 | | 1.61 | 1.20 | | mg/Kg | ☼ | 74 | 56 - 122 | 11 | 30 |
| Pyrene | <0.040 | | 1.61 | 1.06 | | mg/Kg | ☼ | 66 | 63 - 120 | 5 | 30 |
| 1,2,4-Trichlorobenzene | <0.20 | | 1.61 | 1.09 | | mg/Kg | ☼ | 68 | 62 - 110 | 11 | 30 |
| 2,4,5-Trichlorophenol | <0.40 | | 1.61 | 1.37 | | mg/Kg | ☼ | 85 | 50 - 120 | 6 | 30 |
| 2,4,6-Trichlorophenol | <0.40 | | 1.61 | 1.31 | | mg/Kg | ☼ | 81 | 57 - 120 | 14 | 30 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|----------------------|---------------|---------------|----------|
| 2-Fluorobiphenyl | 76 | | 44 - 121 |
| 2-Fluorophenol | 86 | | 46 - 133 |
| Nitrobenzene-d5 | 72 | | 41 - 120 |
| Phenol-d5 | 70 | | 46 - 125 |
| Terphenyl-d14 | 69 | | 35 - 160 |
| 2,4,6-Tribromophenol | 105 | | 25 - 139 |

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-411275/1-A
Matrix: Solid
Analysis Batch: 411518

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 411275

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | <0.017 | | 0.017 | 0.0059 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| PCB-1221 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| PCB-1232 | <0.017 | | 0.017 | 0.0073 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| PCB-1242 | <0.017 | | 0.017 | 0.0055 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| PCB-1248 | <0.017 | | 0.017 | 0.0066 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| PCB-1254 | <0.017 | | 0.017 | 0.0036 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| PCB-1260 | <0.017 | | 0.017 | 0.0082 | mg/Kg | | 11/24/17 07:47 | 11/27/17 12:47 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|--------------|--------------|----------|----------------|----------------|---------|
| Tetrachloro-m-xylene | 107 | | 49 - 129 | 11/24/17 07:47 | 11/27/17 12:47 | 1 |
| DCB Decachlorobiphenyl | 106 | | 37 - 121 | 11/24/17 07:47 | 11/27/17 12:47 | 1 |

Lab Sample ID: LCS 500-411275/3-A
Matrix: Solid
Analysis Batch: 411518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411275

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| PCB-1016 | 0.167 | 0.154 | | mg/Kg | | 92 | 57 - 120 |
| PCB-1260 | 0.167 | 0.168 | | mg/Kg | | 101 | 61 - 125 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 500-411275/3-A
Matrix: Solid
Analysis Batch: 411518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411275

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|------------------------|------------------|------------------|----------|
| Tetrachloro-m-xylene | 99 | | 49 - 129 |
| DCB Decachlorobiphenyl | 101 | | 37 - 121 |

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-411251/1-A
Matrix: Solid
Analysis Batch: 411309

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 411251

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|--------------|-----------------|------|-------|-------|---|----------------|----------------|---------|
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Cadmium | 0.0630 | J | 0.20 | 0.036 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 11/23/17 07:44 | 11/23/17 23:04 | 1 |

Lab Sample ID: LCS 500-411251/2-A
Matrix: Solid
Analysis Batch: 411309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411251

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|----------------|---------------|------------------|-------|---|------|----------|
| Antimony | 50.0 | 46.2 | | mg/Kg | | 92 | 80 - 120 |
| Arsenic | 10.0 | 9.07 | | mg/Kg | | 91 | 80 - 120 |
| Barium | 200 | 195 | | mg/Kg | | 97 | 80 - 120 |
| Beryllium | 5.00 | 4.91 | | mg/Kg | | 98 | 80 - 120 |
| Cadmium | 5.00 | 4.87 | | mg/Kg | | 97 | 80 - 120 |
| Chromium | 20.0 | 19.0 | | mg/Kg | | 95 | 80 - 120 |
| Cobalt | 50.0 | 48.4 | | mg/Kg | | 97 | 80 - 120 |
| Copper | 25.0 | 24.6 | | mg/Kg | | 99 | 80 - 120 |
| Iron | 100 | 101 | | mg/Kg | | 101 | 80 - 120 |
| Lead | 10.0 | 9.31 | | mg/Kg | | 93 | 80 - 120 |
| Manganese | 50.0 | 48.5 | | mg/Kg | | 97 | 80 - 120 |
| Nickel | 50.0 | 48.9 | | mg/Kg | | 98 | 80 - 120 |
| Selenium | 10.0 | 9.48 | | mg/Kg | | 95 | 80 - 120 |
| Silver | 5.00 | 4.61 | | mg/Kg | | 92 | 80 - 120 |
| Thallium | 10.0 | 9.58 | | mg/Kg | | 96 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-411251/2-A
Matrix: Solid
Analysis Batch: 411309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411251
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|----------|-------------|------------|---------------|-------|---|------|----------|
| Vanadium | 50.0 | 47.7 | | mg/Kg | | 95 | 80 - 120 |
| Zinc | 50.0 | 48.3 | | mg/Kg | | 97 | 80 - 120 |

Lab Sample ID: 500-137674-1 MS
Matrix: Solid
Analysis Batch: 411309

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411251
%Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|----------|
| Antimony | <1.2 | F1 | 30.4 | 5.53 | F1 | mg/Kg | ☼ | 18 | 75 - 125 |
| Arsenic | 10 | F1 | 6.09 | 14.8 | | mg/Kg | ☼ | 75 | 75 - 125 |
| Barium | 79 | | 122 | 198 | | mg/Kg | ☼ | 97 | 75 - 125 |
| Beryllium | 0.36 | | 3.04 | 3.14 | | mg/Kg | ☼ | 92 | 75 - 125 |
| Cadmium | 0.022 | J B | 3.04 | 2.64 | | mg/Kg | ☼ | 86 | 75 - 125 |
| Chromium | 21 | | 12.2 | 32.6 | | mg/Kg | ☼ | 98 | 75 - 125 |
| Cobalt | 4.3 | | 30.4 | 33.3 | | mg/Kg | ☼ | 95 | 75 - 125 |
| Copper | 14 | | 15.2 | 29.3 | | mg/Kg | ☼ | 100 | 75 - 125 |
| Iron | 25000 | | 60.9 | 26700 | 4 | mg/Kg | ☼ | 2082 | 75 - 125 |
| Lead | 16 | F1 | 6.09 | 21.4 | | mg/Kg | ☼ | 88 | 75 - 125 |
| Manganese | 180 | F2 | 30.4 | 229 | 4 | mg/Kg | ☼ | 150 | 75 - 125 |
| Nickel | 15 | | 30.4 | 47.7 | | mg/Kg | ☼ | 107 | 75 - 125 |
| Selenium | 0.53 | J F1 | 6.09 | 5.19 | | mg/Kg | ☼ | 77 | 75 - 125 |
| Silver | <0.31 | | 3.04 | 2.56 | | mg/Kg | ☼ | 84 | 75 - 125 |
| Thallium | <0.61 | | 6.09 | 5.23 | | mg/Kg | ☼ | 86 | 75 - 125 |
| Vanadium | 43 | | 30.4 | 70.5 | | mg/Kg | ☼ | 92 | 75 - 125 |
| Zinc | 59 | | 30.4 | 91.9 | | mg/Kg | ☼ | 107 | 75 - 125 |

Lab Sample ID: 500-137674-1 MSD
Matrix: Solid
Analysis Batch: 411309

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411251
%Rec.

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|-----------|---------------|------------------|-------------|------------|---------------|-------|---|------|----------|-----|-------|
| Antimony | <1.2 | F1 | 27.6 | 5.44 | F1 | mg/Kg | ☼ | 20 | 75 - 125 | 2 | 20 |
| Arsenic | 10 | F1 | 5.52 | 13.2 | F1 | mg/Kg | ☼ | 54 | 75 - 125 | 11 | 20 |
| Barium | 79 | | 110 | 181 | | mg/Kg | ☼ | 92 | 75 - 125 | 9 | 20 |
| Beryllium | 0.36 | | 2.76 | 2.90 | | mg/Kg | ☼ | 92 | 75 - 125 | 8 | 20 |
| Cadmium | 0.022 | J B | 2.76 | 2.36 | | mg/Kg | ☼ | 85 | 75 - 125 | 11 | 20 |
| Chromium | 21 | | 11.0 | 32.5 | | mg/Kg | ☼ | 107 | 75 - 125 | 0 | 20 |
| Cobalt | 4.3 | | 27.6 | 30.4 | | mg/Kg | ☼ | 95 | 75 - 125 | 9 | 20 |
| Copper | 14 | | 13.8 | 26.7 | | mg/Kg | ☼ | 92 | 75 - 125 | 9 | 20 |
| Iron | 25000 | | 55.2 | 25000 | 4 | mg/Kg | ☼ | -786 | 75 - 125 | 7 | 20 |
| Lead | 16 | F1 | 5.52 | 19.8 | F1 | mg/Kg | ☼ | 68 | 75 - 125 | 8 | 20 |
| Manganese | 180 | F2 | 27.6 | 185 | 4 F2 | mg/Kg | ☼ | 6 | 75 - 125 | 21 | 20 |
| Nickel | 15 | | 27.6 | 46.4 | | mg/Kg | ☼ | 113 | 75 - 125 | 3 | 20 |
| Selenium | 0.53 | J F1 | 5.52 | 4.42 | F1 | mg/Kg | ☼ | 70 | 75 - 125 | 16 | 20 |
| Silver | <0.31 | | 2.76 | 2.28 | | mg/Kg | ☼ | 82 | 75 - 125 | 12 | 20 |
| Thallium | <0.61 | | 5.52 | 4.79 | | mg/Kg | ☼ | 87 | 75 - 125 | 9 | 20 |
| Vanadium | 43 | | 27.6 | 70.1 | | mg/Kg | ☼ | 100 | 75 - 125 | 1 | 20 |
| Zinc | 59 | | 27.6 | 92.4 | | mg/Kg | ☼ | 119 | 75 - 125 | 1 | 20 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-137674-1 DU
Matrix: Solid
Analysis Batch: 411309

Client Sample ID: 3160-32-07
Prep Type: Total/NA
Prep Batch: 411251

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|-----------|---------------|------------------|-----------|--------------|-------|---|-----|-----------|
| Antimony | <1.2 | F1 | <1.2 | | mg/Kg | ☼ | NC | 20 |
| Arsenic | 10 | F1 | 10.2 | | mg/Kg | ☼ | 0.6 | 20 |
| Barium | 79 | | 70.8 | | mg/Kg | ☼ | 11 | 20 |
| Beryllium | 0.36 | | 0.314 | | mg/Kg | ☼ | 12 | 20 |
| Cadmium | 0.022 | J B | <0.12 | | mg/Kg | ☼ | NC | 20 |
| Chromium | 21 | | 18.4 | | mg/Kg | ☼ | 12 | 20 |
| Cobalt | 4.3 | | 3.97 | | mg/Kg | ☼ | 8 | 20 |
| Copper | 14 | | 12.8 | | mg/Kg | ☼ | 9 | 20 |
| Iron | 25000 | | 24000 | | mg/Kg | ☼ | 6 | 20 |
| Lead | 16 | F1 | 15.7 | | mg/Kg | ☼ | 2 | 20 |
| Manganese | 180 | F2 | 176 | | mg/Kg | ☼ | 4 | 20 |
| Nickel | 15 | | 13.5 | | mg/Kg | ☼ | 12 | 20 |
| Selenium | 0.53 | J F1 | 0.464 | J | mg/Kg | ☼ | 13 | 20 |
| Silver | <0.31 | | <0.30 | | mg/Kg | ☼ | NC | 20 |
| Thallium | <0.61 | | <0.60 | | mg/Kg | ☼ | NC | 20 |
| Vanadium | 43 | | 35.7 | | mg/Kg | ☼ | 18 | 20 |
| Zinc | 59 | | 54.7 | | mg/Kg | ☼ | 8 | 20 |

Lab Sample ID: LCS 500-411800/2-A
Matrix: Solid
Analysis Batch: 411940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411800
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Arsenic | 0.100 | 0.0997 | | mg/L | | 100 | 80 - 120 |
| Barium | 0.500 | 0.507 | | mg/L | | 101 | 80 - 120 |
| Beryllium | 0.0500 | 0.0509 | | mg/L | | 102 | 80 - 120 |
| Cadmium | 0.0500 | 0.0498 | | mg/L | | 100 | 80 - 120 |
| Chromium | 0.200 | 0.202 | | mg/L | | 101 | 80 - 120 |
| Cobalt | 0.500 | 0.503 | | mg/L | | 101 | 80 - 120 |
| Copper | 0.250 | 0.261 | | mg/L | | 104 | 80 - 120 |
| Iron | 1.00 | 1.09 | | mg/L | | 109 | 80 - 120 |
| Lead | 0.100 | 0.0958 | | mg/L | | 96 | 80 - 120 |
| Manganese | 0.500 | 0.502 | | mg/L | | 100 | 80 - 120 |
| Nickel | 0.500 | 0.503 | | mg/L | | 101 | 80 - 120 |
| Selenium | 0.100 | 0.0956 | | mg/L | | 96 | 80 - 120 |
| Silver | 0.0500 | 0.0478 | | mg/L | | 96 | 80 - 120 |
| Vanadium | 0.500 | 0.516 | | mg/L | | 103 | 80 - 120 |
| Zinc | 0.500 | 0.489 | J | mg/L | | 98 | 80 - 120 |

Lab Sample ID: LCS 500-411807/2-A
Matrix: Solid
Analysis Batch: 411942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411807
%Rec.

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|-----------|-------------|------------|---------------|------|---|------|----------|
| Manganese | 0.500 | 0.498 | | mg/L | | 100 | 80 - 120 |

TestAmerica Chicago

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-411663/1-B
Matrix: Solid
Analysis Batch: 411940

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 411800

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Beryllium | <0.0040 | | 0.0040 | 0.0040 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Cobalt | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Copper | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Iron | <0.40 | | 0.40 | 0.20 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Lead | <0.0075 | | 0.0075 | 0.0075 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Nickel | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Vanadium | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |
| Zinc | <0.50 | | 0.50 | 0.020 | mg/L | | 11/29/17 08:23 | 11/29/17 15:15 | 1 |

Lab Sample ID: LB 500-411674/1-B
Matrix: Solid
Analysis Batch: 411942

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 411807

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------|-----------|--------------|-------|-------|------|---|----------------|----------------|---------|
| Manganese | <0.025 | | 0.025 | 0.010 | mg/L | | 11/29/17 09:01 | 11/29/17 16:21 | 1 |

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-411800/2-A
Matrix: Solid
Analysis Batch: 411982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411800

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Antimony | 0.500 | 0.499 | | mg/L | | 100 | 80 - 120 |
| Thallium | 0.100 | 0.104 | | mg/L | | 104 | 80 - 120 |

Lab Sample ID: LB 500-411663/1-B
Matrix: Solid
Analysis Batch: 411982

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 411800

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|--------|------|---|----------------|----------------|---------|
| Antimony | <0.0060 | | 0.0060 | 0.0060 | mg/L | | 11/29/17 08:23 | 11/29/17 16:33 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.0020 | mg/L | | 11/29/17 08:23 | 11/29/17 16:33 | 1 |

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-411892/12-A
Matrix: Solid
Analysis Batch: 412012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 411892

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/29/17 15:15 | 11/30/17 09:46 | 1 |

Lab Sample ID: LCS 500-411892/13-A
Matrix: Solid
Analysis Batch: 412012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411892

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|------|---|------|----------|
| Mercury | 0.00200 | 0.00210 | | mg/L | | 105 | 80 - 120 |

Lab Sample ID: LB 500-411663/1-C
Matrix: Solid
Analysis Batch: 412012

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 411892

| Analyte | LB Result | LB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | 0.00020 | mg/L | | 11/29/17 15:15 | 11/30/17 10:01 | 1 |

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-411477/12-A
Matrix: Solid
Analysis Batch: 411792

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 411477

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|--------|-------|---|----------------|----------------|---------|
| Mercury | 0.00608 | J | 0.017 | 0.0056 | mg/Kg | | 11/27/17 14:00 | 11/28/17 09:00 | 1 |

Lab Sample ID: LCS 500-411477/13-A
Matrix: Solid
Analysis Batch: 411792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411477

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---------|-------------|------------|---------------|-------|---|------|----------|
| Mercury | 0.167 | 0.168 | | mg/Kg | | 100 | 80 - 120 |

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
 Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Client Sample ID: 3160-32-07

Date Collected: 11/21/17 15:05

Date Received: 11/22/17 13:58

Lab Sample ID: 500-137674-1

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|--|---------|---------|
| SPLP East | Leach | 1312 | | | 411674 | 11/28/17 13:45 | JLC | TAL CHI |
| SPLP East | Prep | 3010A | | | 411807 | 11/29/17 09:01 | JEF | TAL CHI |
| SPLP East | Analysis | 6010B | | 1 | 411942 | 11/29/17 16:25 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 411663 | 11/28/17 13:45 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 411800 | 11/29/17 08:23 | JEF | TAL CHI |
| TCLP | Analysis | 6010B | | 1 | 411940 | 11/29/17 16:04 | PJ1 | TAL CHI |
| TCLP | Leach | 1311 | | | 411663 | 11/28/17 13:45 | JLC | TAL CHI |
| TCLP | Prep | 3010A | | | 411800 | 11/29/17 08:23 | JEF | TAL CHI |
| TCLP | Analysis | 6020A | | 1 | 411982 | 11/29/17 16:37 | FXG | TAL CHI |
| TCLP | Leach | 1311 | | | 411663 | 11/28/17 13:45 | JLC | TAL CHI |
| TCLP | Prep | 7470A | | | 411892 | 11/29/17 15:15 | EEN | TAL CHI |
| TCLP | Analysis | 7470A | | 1 | 412012 | 11/30/17 10:07 | EEN | TAL CHI |
| Total/NA | Analysis | 9045D | | 1 | 411701 | (Start) 11/28/17 13:02 (End) 11/28/17 13:09 | SMO | TAL CHI |
| Total/NA | Analysis | Moisture | | 1 | 411344 | 11/24/17 11:33 | LWN | TAL CHI |

Client Sample ID: 3160-32-07

Date Collected: 11/21/17 15:05

Date Received: 11/22/17 13:58

Lab Sample ID: 500-137674-1

Matrix: Solid

Percent Solids: 80.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 411403 | 11/22/17 17:00 | WRE | TAL CHI |
| Total/NA | Analysis | 8260B | | 1 | 411445 | 11/27/17 12:01 | DJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 411212 | 11/22/17 16:19 | NRJ | TAL CHI |
| Total/NA | Analysis | 8270D | | 1 | 411454 | 11/27/17 16:03 | AJD | TAL CHI |
| Total/NA | Prep | 3541 | | | 411275 | 11/24/17 07:47 | JP1 | TAL CHI |
| Total/NA | Analysis | 8082A | | 1 | 411995 | 11/30/17 11:32 | BJH | TAL CHI |
| Total/NA | Prep | 3050B | | | 411251 | 11/23/17 07:44 | JEF | TAL CHI |
| Total/NA | Analysis | 6010B | | 1 | 411309 | 11/23/17 23:17 | KML | TAL CHI |
| Total/NA | Prep | 7471B | | | 411477 | 11/27/17 14:00 | JEF | TAL CHI |
| Total/NA | Analysis | 7471B | | 1 | 411792 | 11/28/17 09:56 | EEN | TAL CHI |

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: IDOT - Benton - WO 028

TestAmerica Job ID: 500-137674-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| Illinois | NELAP | 5 | 100201 | 04-30-18 |

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

| Analysis Method | Prep Method | Matrix | Analyte |
|-----------------|-------------|--------|----------------------------|
| 6020A | 3010A | Solid | Antimony |
| 6020A | 3010A | Solid | Thallium |
| 8260B | 5035 | Solid | 1,3-Dichloropropene, Total |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

Report To (optional) _____ Bill To (optional) _____
 Contact: Terry Dixon Contact: _____
 Company: AmecFW wood Company: _____
 Address: _____ Address: _____
 Address: _____ Address: _____
 Phone: _____ Phone: _____
 Fax: _____ Fax: _____
 E-Mail: _____ PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500137674
 Chain of Custody Number: _____
 Page 1 of 1
 Temperature °C of Cooler: -0.8 to 0.7

| Client <u>AmecFW wood</u> | | Client Project # | | Preservative | | | Parameter | VOCs | SVOCs | PCB | Total Metals | TCLP Metals | SPLP metals | PH | % solids | Preservative Key | | |
|---|--------|------------------------------|-----------------|----------------------------------|----------|-----------------|-----------|------|-------|-----|--------------|-------------|-------------|----|----------|---|----------|---------------------------------------|
| Project Name <u>EDOT Benton WO-28</u> | | | | | | # of Containers | | | | | | | | | | Matrix | Comments | |
| Project Location/State <u>IL RT 37 Benton IL</u> | | | | Lab Project # <u>50013898</u> | | | | | | | | | | | | | | |
| Sampler <u>Denn Peterson</u> | | Lab PM <u>Dick Wright</u> | | Sampling | | Date | Time | X | X | X | X | X | X | X | X | 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other | | |
| Lab ID | MS/MSD | Sample ID | | | | | | | | | | | | | | | | |
| <u>1</u> | | <u>3160-32-07</u> | <u>11-21-17</u> | <u>305</u> | <u>6</u> | <u>5</u> | | | | | | | | | | | | <u>Hold SPLP Pending TCLP results</u> |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | |



500-137674 COC

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Routine Other ___
 Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

| | | | | | | | | | |
|---|--------------------------|-------------------------|---------------------|-----------------------------------|-------------------------|-------------------------|---------------------|----------------|----------------------|
| Relinquished By <u>Denn Peterson</u> | Company <u>AmecFW</u> | Date <u>11-21-17</u> | Time <u>1630</u> | Received By <u>Amel Sewing</u> | Company <u>TAUSA</u> | Date <u>11/22/17</u> | Time <u>0905</u> | Lab Courier | <input type="text"/> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time | Shipped | <u>Ex Priority</u> |
| Relinquished By | Company | Date | Time | Received By | Company | Date | Time | Hand Delivered | <input type="text"/> |

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WJ - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-137674-1

Login Number: 137674

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 0.7 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 500-137674-1

Login Number: 137674

List Source: TestAmerica Chicago

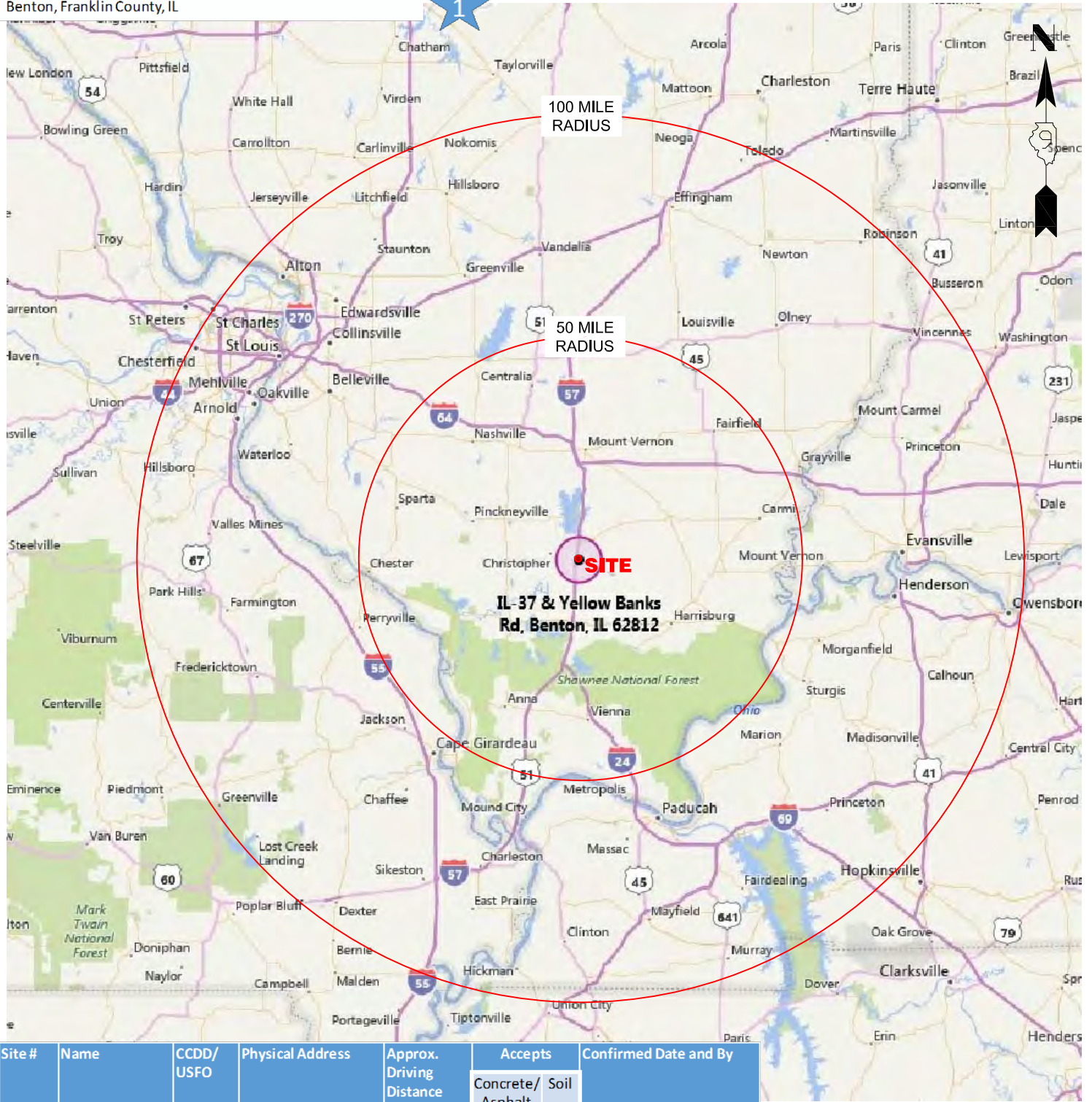
List Number: 1

Creator: Sanchez, Ariel M

| Question | Answer | Comment |
|---|--------|---------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 0.7 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

**Appendix D – CCDD 663 Certifications
(Submitted Separately)**

Appendix E – CCDD/USFO Locations



| Site # | Name | CCDD/ USFO | Physical Address | Approx. Driving Distance From Project | Accepts | | Confirmed Date and By |
|--------|-------------------------------|---------------|--------------------------------|--|----------------------|------|-----------------------|
| | | | | | Concrete/ Asphalt | Soil | |
| 1 | Buckhart Sand & Gravel Co Inc | CCDD | 10499 Buckhart Road, Rochester | 147 mi. | YES | YES | 5/12/2017 -TD |

1. All Sites confirmed by AMEC Foster Wheeler staff on May 12, 2017.
 2. Data from IEPA website last updated April 13, 2015.

Notes:
 1. This table and figure illustrate the five closest CCDD/USFO locations. There may be more.
 2. There are not five or more locations within 100 miles of the project site; therefore, all valid locations are shown.



**WORK ORDER 28
 CCDD LOCATIONS**

IDOT JOB #: D-99-037-03
 CONTRACT NO.: 98820
 DISTRICT 9
 FAS 2882
 S. Corporate Limit in Benton to Yellow Banks Road

DATE: 10/5/2017
 DRAWING-LOCATION: P:\Env\3160150049\CADD\task 28\wo 28 investigation data summary_a.dwg

| | |
|----------|----------|
| DESIGNED | XXX |
| DRAWN | GAP |
| CHECKED | XXX |
| DATE | 1/3/2018 |



4232 N. BRANDYWINE DR.
 SUITE A
 PEORIA, ILLINOIS 61614
 PH (309) 692-4422
 FX (309) 692-9364