

CERCLA Site Reassessment A StONITH Prepared by: Office of Site Evaluation **Division of Remediation Management Bureau of Land** 

**HRS Page Number 1** 

## SIGNATURE PAGE

#### Title: SITE REASSESSMENT for ACME STEEL COKE PLANT

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HRS Page Number 2

# CERCLA SITE REASSESSMENT

for:

Acme Steel Coke Plant Chicago, Illinois ILN000509241

PREPARED BY: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY BUREAU OF LAND OFFICE OF SITE EVALUATION

April 14, 2023

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#### **1.0 INTRODUCTION**

On March 28, 2018, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation was tasked by the United States Environmental Protection Agency (U.S. EPA) Region V to conduct a Site Reassessment (SR) at the Acme Steel Coke Plant site in Chicago, Illinois. The Acme Steel Coke Plant site (CERCLIS ID# ILN000509241) is located in Cook County at 11236 South Torrence, Chicago, Illinois 60617. The site coordinates obtained at the facility's main gate are 41°41'28.605" latitude, 87°33'34.662" longitude and reside in the southeast quadrant of Section 13 and the northeast quadrant of Section 24 of Township 37 North, Range 10 East of the Third Principal Meridian.

The Site Reassessment is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund. Current U.S. EPA policy stipulates that a Site Reassessment be conducted to determine the status of the Acme Steel Coke Plant site. The Site Reassessment will consist of an evaluation of recent information and the collection of a small number of samples to determine if further Superfund investigations are warranted. The Site Reassessment will supplement previous work and is not intended to replace previous CERCLA assessments.

The Site Reassessment is designed to evaluate recent information that will help determine if the site qualifies for possible inclusion on the National Priorities List (NPL) or should receive a No Further Remedial Action Planned (NFRAP) designation. At the conclusion of the reassessment process, Illinois EPA will recommend that the site be given a NFRAP designation, receive further Superfund investigations, or be referred to another state or federal cleanup program.

The Acme Steel Coke Plant was placed on Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS, now known as Superfund Enterprise Management System or SEMS) in November 2004 in consideration of liquid waste material stored on-site in above ground tanks and solid waste scattered across the site. The site was assigned a high priority for Combined Assessment (CA) activities. The CA was conducted in 2005. In 2010 samples were collected at the site and in the surrounding area in support of an Expanded Site Inspection (ESI).

The Site Reassessment Report will describe current site conditions and illustrate how the site has changed since the last completed CERCLA investigation. This report will contain a summary of existing information that will include site history, current site conditions, evaluate historic analytical data as well as data from samples collected during this Site Reassessment. The Site Reassessment will also support emergency response or time-critical removal activities if they are warranted.

## 2.0 SITE DESCRIPTION AND HISTORY

## 2.1 Site Description

The Acme Steel Coke Plant site is the location of a formerly active coking facility situated approximately 14 miles south of downtown Chicago, in Cook County Illinois. The Acme Steel Coke Plant, once known as "Chicago Coke Plant" was one of three facilities in the Chicago area owned and operated by Interlake, Inc. (Iron and Steel Division) (Klopke). The facility consists of approximately 104 acres. The heart of the facility, once consisting of process buildings and adjacent areas, comprises approximately 11 acres. The facility has been inactive since operations shut down in November of 2001. Figure 1 of this report shows the site's location and the surrounding area.

The Calumet River and Lake Michigan are 0.3 miles and 2.83 miles east of the site, respectively. Immediately bordering the site to the west are tracks owned by Norfolk and Western Railroad and a 289-acre parcel owned primarily by Waste Management Incorporated (Illinois EPA, Interlake ESI; Cook County). The Waste Management Incorporated (WMI) property is listed on SEMS as "Interlake Property" ID#ILD000810432 (Illinois EPA, Interlake ESI). The Interlake Property consists of an inactive landfill and lagoon, Indian Treaty Creek, and Big Marsh (Illinois EPA, Interlake ESI). The U.S. Fish and Wildlife Service identified over 78 acres of the Interlake Property as wetlands in 2010<sup>1</sup>. Big Marsh is located just 0.26 miles west of the Acree Steel facility. Lake Calumet is located further to the west, 0.83 miles from the

<sup>&</sup>lt;sup>1</sup> As identified in the Geographic Information System layer 2010 National Wetlands Inventory (U.S. Fish and Wildlife)

facility. Indian Ridge Marsh North is located adjacent to the facility on the south side. The Lake Calumet Cluster Superfund site is located to the southwest of the Acme Steel facility (USEPA, Superfund Sites). The Lake Calumet Cluster (LCC) site is an 87-acre site including a group of land and waste storage and disposal facilities one known as US Drum, Auburn Incinerator, Unnamed Parcel, and a portion of Paxton Lagoons (USEPA, Superfund Sites). The area surrounding the site is highly industrialized although a residential neighborhood exists approximately 1000 feet north of the facility.

Topography at the Acme Steel Coke Plant site is primarily flat. Placement of waste material (coal fines/cinders) throughout portions of the site have created depressions and elevated areas causing surface water run-off to flow in multiple directions depending on the vicinity of the site. The west portion of the site appears to be the lowest in elevation as is evidenced by waterloving vegetation and standing water. Waste materials were also used to create a series of berms and water-filled ditches on the west and south of the site. Surface water appears to remain on the site throughout the year in three areas: the settling basin on the southeast corner of the property; a ponded area on the northwest corner of the property; and, the remains of a perennial waterway that previously flowed through the west-central portion of the property. Surface water run-off from small portions of the facility drain to the east and south. Acme installed a French drain system along portions of the eastern boundary of the facility in order to collect surface water run-off and shallow groundwater prior to leaving the site on the east (Holmberg, Personal). Historically, during heavy rainfall events, surface water run-off flowed off the site to the east and onto Torrence Avenue (Sulski). A United States Geological Survey topographic map from 1991 shows a perennial waterway originating on the west central portion of Acme and flowing south, southwest off-site and ultimately connecting with Indian Ridge Marsh. Figure 2 of this report provides an aerial photograph of the facility and surrounding areas from 2005.

In 2006, on behalf of the Chicago Department of the Environment, V3 Companies, LTD published a report entitled "The Calumet Hydrologic Master Plan". The report compiled hydrology information on multiple water bodies and adjacent parcels in the Calumet area. Among the comprehensive information on surface water drainage in many area in the region, the report included information on hydrology at the Acme Steel Coke Plant as it relates to Big Marsh, Indian Ridge Marsh, and the LCC site properties (located adjacent to the southwest of

the site. The report identified two water control structures draining surface water from Acme onto adjacent properties. (Appendix A to this report contains portions of the Calumet Hydrologic Master Plan related to the site.) A 12-inch diameter culvert drains the southwest portion of the site westward beneath the railroad tracks into surface water located at Big Marsh and associated with wetlands. Likewise, a 36-inch culvert was identified that drains the southwest corner of the Coke Plant southward under 116<sup>th</sup> Street into Indian Ridge Marsh and associated wetlands.

Investigations conducted at the Lake Calumet Cluster site documented the hydraulic connection between LCC facilities located west of the railroad tracks and Indian Ridge Marsh (Illinois EPA, Addendum). During a field event conducted in 2004 (in preparation for the potential listing of the LCC site), a culvert was identified approximately 1300 feet south of 116<sup>th</sup> Street that drained surface water that was pooling in ditches on the west side of the tracks into the Marsh located on the east side of the tracks (Illinois EPA, Addendum). Laboratory results from the 2004 sampling indicated that concentrations of various semi volatiles from the LCC site had an observed impact on the southern portions of the marsh (Illinois EPA, Addendum). Concentrations of semi volatile compounds attributable to the LCC site in Indian Ridge Marsh are discussed further in Section 5.2.2.2 of this report.

Vegetation on the site in areas adjacent to process buildings is sparse, most likely due to the large amount of fill material made up of cinders and gravel along with some tar and slag. Short grasses are spread thinly on the south and southwest portions of the site, surviving despite waste materials spread throughout the area. On the extreme western portion of the site, Phragmites is growing well despite the presence of waste materials. Several species of waterfowl are found in the area surrounding the site including egrets, ducks, shore birds, gulls and herons (Illinois EPA, Interlake ESI). The surface of the approximately 104-acre site is almost entirely black due to the presence of waste used as fill material. In many areas the coal fines/cinders placed on the ground had black oil stains with a strong hydrocarbon odor. Coal tar was present at the surface in the area southwest of the process buildings. Other areas, specifically south, southwest of the light oil building also had tar bubbling to the surface.

Approximately four intact buildings remain on-site. Trespassers can access the site by foot through a few holes cut into a relatively intact, 6-foot hurricane fence that surrounds the

property. The site can be accessed through the front gate off Torrence Avenue with a key to the lock.

A study of the geology of the area was conducted on behalf of USEPA with the findings included in the 1990 report entitled: Lake Calumet Area Ground-Water Quality Investigation and Monitoring Program Design for the Lake Calumet Area of Southeast Chicago. In the 1990 report, area unconsolidated deposits are described as Lemont Till and Wadsworth Till, overlain by the deposits of glacial Lake Chicago (Equality Formation). The Equality Formation is comprised of silt, clay, and discontinuous spits and bars of sand (the Dolton Member). The Wadsworth Till Member underlies the Equality Formation and is comprised of poorly sorted gray silty clay. The Lemont Till underlies the Wadsworth Till and is comprised of a poorly sorted sediment containing primarily silt, as well as sand and gravel. Except for the sand lenses in the Dolton Member, the till units are relatively impermeable. Bedrock in the area consists of Silurian Age Dolomite. The unconsolidated deposits in the Lake Calumet Area are on average, about 75 feet thick. (Cravens and Zahn)

The depth to bedrock identified at the Interlake site immediately to the west, ranged from "30 feet below ground surface in the northeast corner of the site to 100 feet below ground surface in the southeast corner of the site (Illinois EPA, Interlake ESI)".

Groundwater use was researched by the Lake Calumet Area Ground-Water Quality Investigation in a 39-square-mile area surrounding Lake Calumet (which includes the Acme site). Almost all of the water use in the area and surrounding region is supplied by surface water from Lake Michigan (Cravens and Zahn). Records of only 80 well records finished in the Silurian aquifer were identified in the area, 47 of which were established for industrial/commercial purposes (Cravens and Zahn). As of 1990, only 30 wells were known to be actively pumping from the Silurian Aquifer within the 39-square-mile area with approximately 6 being used domestically (Cravens and Zahn). Two wells were identified by Cravens and Zahn that utilized groundwater from the shallow unconsolidated deposits in the area.

The well database of the Illinois State Geological Survey (ISGS) was queried to identify wells within 2 miles of the Acme Steel Coke Plant site. Two water-well records were identified onsite, registered to "Coke Oven Plant" and apparently located in the north-central portion of the site. Both wells were reported to be finished at depths greater than 1000 feet below ground surface. A total of 15 well records were identified within 2 miles of the site, with all 15 wells

having a recorded use of "commercial/industrial". The finished depth of the 15 wells within 2 miles of the site ranged from 145 to 1715 feet below ground surface. Three of the 15 well records were located within one-half mile of the site. The ISGS database does not indicate as to whether or not the wells are still active. (ISGS, Well Database)

"Under natural conditions, ground-water flow within the Silurian dolomite aquifer underlying the region [southern Cook County] is towards the southeast, following the regional dip of the Silurian formations (Cravens and Zahn)." The flow direction of ground water in the unconsolidated deposits of the Lake Calumet area are connected to surface waters, streams rivers, lakes, and wetlands (Craven and Zahn). However, Craven and Zahn note that the shallow ground water flow has been highly altered from its original state due to the large amount of fill material brought into the area. Groundwater flow direction in the unconsolidated aquifer beneath the site is unknown, however studies performed at the Interlake property note that flow direction is generally to the southwest (Illinois EPA, Interlake ESI).

Shallow groundwater flow from properties with greater elevation is suspected to flow into the Indian Ridge Marsh (Roadcap, et al). "Ground-water flow into Indian Ridge Marsh was directly observed on January 19, 1999" when a spring was observed in the northeast corner of the north pool of the marsh (Roadcap, et al). The study hypothesized that due to its elevation, groundwater flow from the LCC site was impacting the marsh (Roadcap, et al). Although the hypothesis was specifically applied to the LCC site, the ACME Steel Coke Plant is also higher in elevation than the marsh, and it is closer to the observed spring than the LCC site.

#### 2.2 Site History

In the late 1800s and early 1900s, the company that later became known as the "Acme Steel Coke Plant" was one of several industrial facilities constructed in the area surrounding the Calumet River in response to available land and transportation (land, rail, and water) opportunities (NEIU, Chicago's). The coke plant located on Chicago's south side was incorporated as the By-Product Corporation in June 1905 (NEIU, South Deering). As of 1911, the By-Product Corporation was well established at the property, with 8 blocks of coke ovens, a by-product processing building, light oil building, product storage tanks, and an extensive on-site network of rail-lines (Sanborn 1911). In December of 1929, the name of the company was changed from By-Product Corporation to Interlake Iron Corporation (NEIU, South Deering). A

Sanborn Fire Insurance map from 1946 indicates that the Interlake Iron Coke Oven Plant had expanded to include most of the buildings/tanks present when the facility began to shut down its operations in October of 2001 (Sanborn 1946; Holmberg, Personal). "In 1964, Acme Steel Company and the Interlake Iron Company merged, combining Interlake's extensive mining, iron, and coke production facilities with Acme's steel producing and finished product capabilities (NEIU, South Deering)."

The Electronic Encyclopedia of Chicago provided the following corporate history for the Acme Steel Company, prior to its merger with Interlake and acquisition of the coke plant.

> The Acme Steel Company originated in Chicago as Acme Flexible Clasp Co. founded in in 1884 (Wilson et al.). In 1899 Acme Flexible Clasp Co. merged with Quincy Hardware Manufacturing and the new company changed its name to Acme Steel Goods Co. in 1907 (Wilson et al.). In 1925, the company became the Acme Steel Company (Wilson et al.).

The coke plant, once known as "Chicago Coke Plant" was one of three facilities in the Chicago area owned and operated by Interlake, Inc. (Iron and Steel Division) (Klopke). As mentioned previously, the three Interlake facilities worked together to produce coke which was in turn used to produce molten iron, which was then used to produce steel (Klopke). Interlake also owned property west of the coke plant and west of Norfolk and Southern Railroad Tracks. During Interlake ownership tenure, waste material from the coking process was placed both on the coking facility itself, as well as on Interlake property west of the railroad tracks.

Coke was produced at the site through destructive distillation ("coking") of coal in coke ovens without the presence of air. The coking process occurred in a coke oven battery (where multiple ovens are operated together). Gases produced during the coking process called "foul" gas<sup>2</sup> were collected and treated on-site through a multi-step process prior to being re-introduced into the coking process as fuel. Tar removed from the foul gas was mixed with coal on-site and also reintroduced into the coking process as fuel.

<sup>&</sup>lt;sup>2</sup> Foul gas contains water vapor, tar, light oils, solid particulate of coal dust, heavy hydrocarbons, and complex carbon compounds. [Gaseous products from the distillation of coal consist of hydrogen, methane, ethylene, carbon monoxide, carbon dioxide, hydrogen sulfide, ammonia, and nitrogen. Liquid products from the distillation of coal include water, tar and crude light oil.] (USEPA, AP-42).

In 1986, Interlake Steel Corporation reorganized and as a result, a newly formed Acme Steel Company took over the coke and steel making facilities in the Chicago area (NEIU, South Deering). Acme Steel struggled to remain profitable and by the end of the 1990s, the number of employees dropped to approximately 1,200, down from approximately 3,500 in the mid-1970s (Wilson et al.). The coke plant began to shut down its operations in October of 2001 (Holmberg, Personal). Sal-Recon, a metal salvage and recycling company began to dismantle the coke plant following shutdown.

In October of 2002, "International Steel Group (ISG) purchased a portion of the assets of Acme Steel from bankruptcy" (USEPA, Acme Chicago). Following the bankruptcy proceedings, "an order of abandonment was issued for the unsold assets of Acme Metals including, apparently, the Chicago Coke Plant" (USEPA, Acme Chicago). Soon after, Vandals and metal scrappers cut the locks at the main gate and cut holes in the fence at multiple locations to enter the facility illegally. Trespassers destroyed building materials and pipe insulation inside various buildings releasing asbestos in and around the heart of the facility. Transformers made of copper tubing and oil containing polychlorinated biphenyls (PCBs) were also destroyed releasing the contaminant onto the soil in the vicinity of the units. In 2004, Salrecon acquired an ownership interest in the structures and fixtures at the site through Acme bankruptcy proceedings and began to salvage scrap salvage operations on-site.

In 2005, U.S. EPA initiated a time-critical removal action at the site with site investigation and waste characterization activities. In 2006, U.S. EPA and its contractors began removal of PCB-oil and soil containing PCBs, along with oil (free of PCBs) from various tanks located on-site. on May 29, 2007 the removal activities concluded with the final shipment off-site of 110 tons of non-hazardous solidified tank residuals and empty containers.

In the years following the removal activity, the remaining buildings on-site have continued to fall into disrepair and in many cases, crumble to the ground. Outside parties have considered the using the slag and other waste materials on-site for additional metals recovery and one entity considered creating a steel industry museum on-site. Plans never materialized. In 2020 the Cook County Land Bank Authority acquired the 36 acre-parcel comprising the southern one-third of the former Acme facility. In late 2021, the SunPower Corporation was negotiating a lease and attempting to secure funding to develop a 20-acre solar array on the parcel. The lease agreement and solar project ultimately fell through although it may again be pursued at a later date. The northern 61-acre parcel remains abandoned and in open tax-delinquent status

held by Cook County (Cook County Clerk). As such, the entire 100-acre facility sits unused except for the occasional trespasser and various wildlife

#### 2.2.1 CERCLA Investigations History

The Acme Steel Coke plant was placed into SEMS in November of 2004 following a site visit conducted by U.S. EPA Region 5 staff and representative from the City of Chicago. During this inspection hazardous wastes were identified in tanks and containers throughout the site and friable asbestos was recognized in multiple buildings.

#### 2.2.1.1 Combined Assessment

In 2005 Illinois EPA conducted a Combined Preliminary Assessment/Site Inspection Assessment (CA) at the site. During the investigation, Illinois EPA collected 16 shallow waste samples and five (5) ground water samples from on-site locations. Additionally, sediment samples were collected from two places on-site and two locations where drainage flowed off the facility. Samples were analyzed for Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), Total Metals, and Pesticides/PCBs. Laboratory results for waste samples identified concentrations of several compounds (primarily semi-volatile compounds) including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-c,d)pyrene) at concentrations significantly above U.S. EPA removal management levels (RMLs) for industrial properties. Groundwater samples collected at the facility showed benzene concentrations greater than maximum contaminant level. Analytical results from sediment samples collected on-site and from the probable point of entry (the Semet-Solvay slip) identified 12 semi-volatile compounds present in each sample at concentrations three-times background. Figure 3 of this report identifies sample locations from the Combined Assessment.

Information obtained during the CA identified three primary and separate sources(s) of contamination at the Acme Steel Coke Plant. Contaminants of concern within each source were primarily SVOCs which were present at concentrations greater than U.S. EPA RMLs for industrial properties. Aerial photographs confirmed by field evaluation and laboratory analysis results were used to determine the total area of each source. Sources are discussed in greater detail in the following section, Section 2.2.1.1.

#### 2.2.1.2 Expanded Site Inspection Sampling

In 2010, Illinois EPA conducted field work for a CERCLA Expanded Site Inspection but did not complete the report. Five additional waste samples (X316 – X320) were collected from the onsite trench that drained the facility and emptied into the Semet-Solvay vessel slip located northeast of the site. Twelve sediment samples (X208 – X219) were collected from within the slip and the Calumet River to evaluate the impact from the discharge from the site had on nearby surface water. Lastly, an additional ten waste samples (X321 – X330) were collected on-site to further determine the extent of waste spread throughout the facility. Figure 4 of this report identifies the ESI sample locations on an aerial photograph from 2011. Table 1 of this report provides sample descriptions and associated information about each sample collected during the Expanded Site Inspection.

Samples were collected were shipped off-site for laboratory analysis for VOCs, SVOCs, total metals, and Pesticide/PCBs. Sample results across all media were insignificant for metals, and pesticides. Three waste samples collected at the facility contained either mercury or cyanide at concentrations exceeding U.S. EPA RMLs. Mercury exceeded RMLs in samples X317, X318 and X329. Cyanide exceeded RMLs in samples X317 and X318. Samples X317 and X318 were collected from the on-site trench and X329 was a surface waste sample collected in the southeast portion of the site. Laboratory analysis results for PCBs were largely below the level of detection or less than one ppb, if detected; sample X320 collected from the bottom of the on-site trench contained 0.18 ppm Arochlor-1260 which was the greatest concentration for a single congener amongst all the waste and sediment samples. Background sediment samples X210, X211 and X212 had positive detections for PCB congeners, again at concentrations less than 1 ppm. Two sediment release samples had positive detections for PCB congeners less than 1 ppm and did not meet observed release criteria. Tables 2 - 5 of this report display the laboratory results for samples collected during the ESI sampling.

Laboratory results for samples collected during the ESI again showed SVOCs to be the class of compounds present most often at either concentrations greater than RMLs (for on-site waste) or at three-times background (for sediments). Laboratory results for waste samples from the surface of the site identified concentrations of benzo(a)pyrene, dibenzo(a,h)anthracene, and naphthalene at concentrations greater than RMLs for industrial properties. Benzo(a)pyrene was detected at concentrations greater than its RML at waste sample X323 located on the eastern edge of the facility north of the former holding tank area. Sample X330 also contained

benzo(a)pyrene at concentrations greater than its RML along with dibenzo(a,h)anthracene, and naphthalene. Sample X330 was collected in the south-central portion of the facility.

Laboratory results for SVOCs collected from both the on-site trench (waste) and sediments from the slip and the Calumet River are believed to support the site's conceptual model that the onsite trench discharged wastes form on-site into the river. Eight sediment samples collected from the slip and the river were considered to be release samples. The semi-volatile compounds) benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, naphthalene, and indeno(1,2,3-c,d)pyrene) were detected in at least half of the sediment samples at concentrations meeting observed release criteria. These same compounds were detected at significant concentrations in all five of the waste samples collected from the on-site trench. Figures 5 and 6 of this report graphically display concentrations of four semi-volatile compounds identified during the ESI sampling event both on the Acme Steel property and in sediments in the slip and river.

Information obtained during the ESI generally supported the three sources(s) of contamination identified at the Acme Steel Coke Plant during the CA. The sources identified during the CA were the "Tar Impoundment", "French Drain and Discharge Line", and the "Process Waste Pile". Information was identified during the ESI that stated that the discharge line from the French Drain at the facility was collected in a sump and did not discharge to the slip (Holmberg, Telephone). As such, the size of this source was reduced significantly, and it is referred to as the "French Drain and Sump" herein. A fourth source, identified as "Facility Trench and Discharge Line" was identified during the ESI. Regarding the sources "Tar Impoundment", "French Drain and Sump", and the "Process Waste Pile" the conceptual understanding of the contaminants of concern within each source were primarily SVOCs which were present at concentrations significantly above U.S. EPA RMLs for industrial properties. Those same contaminants are present in the fourth source "Facility Trench and Discharge Line" but at lesser concentrations. A combination of aerial photographs, field evaluation, facility maps, and laboratory analysis results were used to determine the total area of each source. The areas of encompassed by the "Tar Impoundment" and the "Process Waste Pile" were calculated as 0.4 acres and 51.4 acres, respectively. The "French Drain and Sump" source was determined to be 496 feet long, 3 feet wide, and was filled with an undetermined amount of tarry waste material. Finally, the "Facility Trench and Discharge Line" source was determined to be 3026 feet long, 3 feet wide, and was filled with an undetermined amount of slag, cinders, and organic liquid with

coal tar odor. Figure 7 of this report shows the HRS sources (and associated samples) identified during the investigation.

## **3.0 OTHER CLEANUP AUTHORITIES AND ACTIONS**

During its years of operation, the facility was regulated by the Illinois EPA under delegated programs regarding the Clean Water Act (National Pollutant Discharge and Elimination System [NPDES]), Clean Air Act (National Emission Standards for Hazardous Air Pollutants [NESHAPs]), and Resource Conservation and Recovery Act (as a large quantity generator). The facility also discharged sewer and facility waste to Chicago's Metropolitan Water Reclamation District (MWRD). Additionally, the facility also had transformers on-site that were known to contain PCBs and was regulated under the Toxic Substances Control Act (TSCA).

The facility was cited often regarding discharges in excess of its NPDES permit. In the late 1970s Illinois EPA was preparing for enforcement action against Interlake (Acme's predecessor) for concentrations of cyanide, total iron, phenols, ammonia nitrogen, suspended solids in its effluent discharges but the case was dismissed in favor of assurances to control both storm water run-off and concentrations of key parameters in point source discharges. Correspondence from the 1990s indicates that the City of Chicago believed that solids entrained in Acme's discharges to the Metropolitan Water Reclamation District was restricting flow through its system. No record of fines imposed or paid were identified.

The facility reported numerous air releases (most often coke oven gas or benzene) due to equipment shutdown or outages. State inspections occasionally resulted in warning letters for discharge of regulated air emission criteria pollutants (carbon monoxide, nitrogen dioxide, particulates, sulfur dioxide, and VOCs) and hazardous air pollutants. There is no record of fines or penalties being assessed.

Minor RCRA violations cited at the facility following Illinois EPA inspections through 1980s and early 1990s. The violations often related to manner and length of on-site storage of coke by-products intended for recycling back into the coke making process. The company was fined over \$1,500,000 by the United States Environmental Protection Agency (USEPA) in 1999 for multiple RCRA violations largely involving on-site land disposal of coke by-products. The case

was settled for \$15,000 and funds were placed in the general treasury. No state records regarding financial assurances were identified.

In 2005 Illinois EPA referred the site to U.S. EPA for a Time Critical Removal Action. Beginning in October 2005 and continuing through May of 2007, U.S. EPA reported the following accomplishments under its removal action:

- Several sections of the perimeter fence were repaired along with the main gate
- Oil with high levels of PCBs was emptied from a large transformer damaged by scrappers. Drums containing the oil along with the transformer carcass were transported off-site for disposal.
- PCB contaminated soil at the location of the damaged transformer was excavated down to PCB concentrations below 1 part per million and transported off-site for disposal.
- Oil-contaminated soils in the Powerhouse Building were excavated and prepared for off-site disposal
- Miscellaneous materials found in drums and containers throughout the site including oil, ignitable, corrosive, and toxic waste streams were overpacked and transported off-site for disposal.
- All asbestos containing material from the site was removed from buildings and piping
- Approximately 110 tons of non-hazardous tank and container residuals were transported off-site for disposal.

Information currently available does not indicate that the site is under the authority of the Atomic Energy Act (AEA), Uranium Mine Tailings Action (UMTRCA), or the Federal Insecticide Fungicide or Rodenticide Act (FIFRA). The site has not undergone any remediation or been enrolled in Illinois EPA's voluntary Site Remediation Program (SRP). A private entity recently considered remediation on approximately 20 of the 36 acres owned by the Cook County Land Bank Authority prior to placement of a solar array but the deal was never finalized.

#### 3.1 Lake Calumet Cluster Site

As discussed in Section 2.1 of this report, the LCC site is immediately to the southwest of the ACME Steel facility. In 2010, the LCC site was placed on the National Priorities List (USEPA, Superfund Sites). Investigation and remediation activities associated with the LCC site are relevant to ACME Streel Coke Plant due to proximity, and also due to the shared connection of both sites to the Indian Ridge Marsh. As mentioned previously, in 2004, a culvert was identified south of 116<sup>th</sup> Street that drained surface water from the west side of the railroad tracks into the Marsh located on the east side(Illinois EPA, Addendum).

In 2015, U.S. EPA's contractor began fieldwork associated with the Remedial Investigation (RI) of the LCC site. Fieldwork conducted during the RI focused on groundwater. However, past

studies involving surface water and sediment sampling were taken into consideration. Data tables and figures in the draft report show semi volatile contamination throughout the north pool of the Indian Ridge Marsh including the vicinity immediately south of the culvert transferring surface water run-off from the ACME Steel Coke in the marsh. (ARCADIS)

# **4.0 SITE REASSESSMENT FIELD ACTIVITIES**

On October 22 and 23, 2018 Illinois EPA conducted the field activities associated with the Site Reassessment slated for the 2018/2019 CERCLA Site Assessment Cooperative Agreement Cycle. Objectives of the reassessment included:

- 1) Evaluate off-site migration by way of ditches and culverts to the west and south of the site
  - (i) Sample background locations along with release points along the ditch west of the facility
- 2) Evaluate off-site migration by way of impacts to the wetlands south of the site
  - (i) Collect sediment samples within the Indian Ridge Marsh
- 3) Confirm the presence of waste material on-site

## 4.1 Sampling Activities

Samples were primarily collected "on-foot" during the Reassessment using a stainless-steel auger and stainless-steel trowel. In several cases when either the sediment or waste could be easily accessed, a stainless-steel trowel was used for sampling without the use of the auger. Samples collected in the main portion of Indian Ridge Marsh were collected from a manually powered aluminum boat. Table 6 of this report provides descriptions and additional information for samples collected during the SR. The locations of samples collected during the SR were marked using a Global Positioning System (GPS) unit and are shown of Figure 8 of this report.

## 4.1.1 Sediment Samples

Illinois EPA began collection of sediment samples from Indian Ridge Marsh east of the railroad tracks and approximately 1,500 feet south of 116<sup>th</sup> Street. Sediment samples X221 and X222 were collected from the freshwater emergent wetland located in the Indian Ridge Marsh<sup>3</sup>. Sample X221 was located the farthest downgradient, approximately 1,400 feet south of the culvert draining the southwest corner of the Coke Plant. Sample X222 was located

<sup>&</sup>lt;sup>3</sup> As identified in the Geographic Information System layer 2010 National Wetlands Inventory (U.S. Fish and Wildlife)

approximately 630 feet south of the culvert draining the Coke Plant. Both samples were collected from an aluminum boat using a stainless-steel auger.

Following collection of sediment samples from Indian Ridge Marsh, the boat was set aside, and the remainder of the SR samples were collected on-foot using a stainless-steel auger and/or a stainless steel trowel. Sediment sample X223 was collected approximately 8 feet south of the culvert pipe running southward under 116<sup>th</sup> Street. The sample was intended to represent impacts from the Acme Steel facility in the drainageway leading into the Indian Ridge Marsh. Sample X223 is approximately 150 feet north of the freshwater emergent wetland as mapped by but U.S. Department of Fish and Wildlife however wetland vegetation was growing within several feet of sample location.

Beginning with sample X224 and continuing through X228, samples were characterized as sediments and discussed within this section as such. However, these samples were collected from ditches or low-lying areas with only intermittent surface water flow and would therefore be characterized as soil and represent overland flow under HRS. Sample X224 was collected from the east side of the ditch on the north side of the culvert flowing under 116<sup>th</sup> Street and into Indian Ridge Marsh. Surface water runoff and drainage from Coke Plant would flow through this ditch and into the culvert.

Samples X225 and X226 were collected along the ditch running north and south along the western border of the Coke Plant property. Surface water runoff from the facility would be captured by this ditch and directed both southward and westward; surface water from the ditch would flow south to the Indian Ridge Marsh through the culvert under 116<sup>th</sup> street and west into drainageways associated with Big Marsh by way of a culvert beneath the railroad tracks. Sample X225 was collected from inside of the pipe draining the ditch immediately west of the facility. Water flowing through this point would flow under the tracks and into surface water drainage connected to Big Marsh. Wetland species line the drainageway on the west side of the tracks where the pipe discharges. The eastern end of the culvert and sample location X225 are located on the southern half of the site, approximately 1000 feet north of the southwestern corner of the facility. Sample X226 was collected from a low-lying area west of the fence running along the western edge of the facility. No observable ditch was found here but the elevation of the area indicates that surface water run-off from the facility would collect here prior to flowing southward along the north/south ditch which is more pronounced nearby.

Sample X227 was collected at the northwestern corner of the Coke Plant within the surface water drainage route flowing southward along the property's western edge. Sample X227 was intended to represent conditions within the drainage route prior to impacts from the facility. Sample collected from low-lying area west of the facility fence and approximately 60 feet east of the railroad tracks. The drainage ditch present on the western edge of the facility toward the south was not discernable at the location where X227 was collected. However, the land still sloped southward from sample location X227 and would flow southward through the ditch and ultimately off-site either to Indian Ridge Marsh or Big Marsh.

Sample X228 was collected from low-lying area north of the Coke Plant's northern boundary within the surface water drainage route flowing southward along the property's western edge. Sample X228 was intended to represent background conditions. Sample collected from low-lying area on the western edge of the wetland located north of the site that appears to drain southward.

#### 4.1.2 Waste Samples

Waste samples were collected during the Reassessment from three locations known to have elevated concentrations of site-related constituents. The samples were intended to confirm that conditions in these locations had not changed significantly since the last CERCLA investigation. Sample X331 was collected in west-central portion of site at the beginning of drainageway that once flowed south and then off-site into Indian Ridge Marsh. Surface water was present in much of the immediate area surrounding the sample location. Phragmites was prevalent growing out of slag fines and cinders mixed with native soils.

Waste sample X332 was collected in south-central portion of site where high concentrations of SVOCs were identified in previous sampling events. Surface of site in the area surrounding the sample location was covered with tar spots, slag pieces and associated fines. This area, once devoid of vegetation entirely now covered with stressed thin grass an occasional scrub tree.

Waste sample X333 was collected in the eastern portion of the facility just south of the area where most of the industrial processes involved in coke production, refining, and storage took place. Sample X333 was collected approximately 15' south of a historic tank location near the eastern edge of the facility. As with sample location X332, vegetation had become more prevalent in the area of X333 which was also once void of any such growth.

#### **4.2 Analytical Results**

Following the sampling activities, samples were packaged in accordance with procedures outlined in Illinois EPA's Multi-Site CERCLA Quality Assurance Project Plan and shipped offsite for analysis to laboratories selected by U.S. EPA under the Contract Laboratory Program. Samples scheduled for organic analysis were shipped to Shealy Environmental Services in South Carolina while samples slated for inorganic analysis went to Bonner Analytical Testing Services in Mississippi. All samples collected during the Reassessment were scheduled for Target Analyte List and Target Compound List constituents including Volatile Organic Compounds, Semi-volatile Organic Compounds, Pesticide and PCBs, and Total Metals.

#### 4.2.1 Sediment Samples

Analytical results for all samples other than waste are discussed within Section 4 of this report collectively as "sediment samples". However, as mentioned previously, only samples identified as X221, X222, and X223 would represent true sediment samples as associated with either a wetland or a perennial waterway as defined in HRS. Sample analysis results for sediments (and those characterized as soils under HRS) collected during the reassessment identified contaminants of concerns that correlated well with past investigations: inorganic, volatile, and pesticide/PCB compounds were found only occasionally at concentrations meeting observed release criteria (3 times background) while semi volatile compounds met the criteria very often. Chromium, zinc, and mercury were detected most often at concentrations meeting observed release criteria, in two of eight samples. Pesticides were not historically identified as a contaminant of concern based on processes at the facility. However, two pesticides, 4,4'-DDT, and methoxychlor were identified concentrations meeting observed release criteria in at least five of seven sediment samples. Polychlorinated biphenyls were identified in two of seven release samples at concentrations meeting observed release criteria. Tables 7 – 10 of this report display the laboratory results for samples collected during the Reassessment.

Laboratory results for samples collected during the Reassessment again showed SVOCs to be the class of compounds present most often on or near the Coke Plant at concentrations greater than three-times background. Concentrations of SVOC meeting observed release criteria were identified in every release sample collected. Sediment sample X223 collected from the ditch just south of the culvert leading into Indian Ridge Marsh contained the greatest number (15) of SVOC compounds at concentrations meeting observed release criteria. Samples X225, X226 and X227 were collected west of the facility in the north-south ditch and each contained 14

SVOC compounds meeting observed release criteria. Both sediment samples X221 and X222 collected from the wetland in Indian Ridge Marsh had SVOCs at concentrations meeting observed release criteria. Sample X221 had nine SVOC compounds at concentrations meeting observed release criteria while X222 contained ten compounds meeting the criteria.

In consideration of the laboratory results for all of the sediment (and soil) release samples, the semi-volatile compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-c,d)pyrene, and pyrene were detected most often, in all seven of the sediment release samples. In general, the highest concentrations of most of the SVOCs was identified in sample X225 which was collected in the southwest region of the site from the north-south ditch on the Coke Plant's western border. Surface water would flow through this area both on its way south to Indian Ridge Marsh, and to the west under the railroad tracks to the Big Marsh watershed.

#### 4.2.2 Waste Samples

Laboratory analysis results for waste samples collected during the reassessment identified contaminants of concern similar to past investigations. Inorganic waste samples were unremarkable and with the exception of cyanide and mercury in sample X333, were similar to sediment background concentrations. Likewise, VOC and Pest/PCB laboratory analysis results were similar to that of sediment background concentrations.

Concentrations of SVOCs in waste samples were generally one to two-times magnitude of those found in the sediment release samples. Waste sample X331, collected in the west-central portion of the site (near the beginning of the surface water drainage route to the south) contained the greatest concentrations of SVOCs. In consideration of SVOC compounds meeting observed release criteria in sediments, fluoranthene was identified at the greatest concentration, at 110,000 ppm. The average concentration of SVOC compounds in X331 that met observed release criteria in sediments was 323 ppm. Tables 7 – 10 of this report display the laboratory results for waste samples collected during the Reassessment.

## **5.0 SOURCE DISCUSSION AND PATHWAY ANALYSIS**

#### 5.1 Source Summary

This section includes descriptions of the various hazardous waste sources that have been identified at the Acme Steel Coke Plant. The Hazard Ranking System defines a "source" as: "Any area where a hazardous substance has been stored, disposed or placed, plus those soils that have become contaminated from migration of hazardous substance." This does not include surface water or sediments below surface water that has become contaminated.

Information obtained during the CA and ESI identified the Tar Impoundment, French Drain and Sump, Facility Trench and Discharge Line, and a Process Waste Pile as four primary and separate sources(s) of contamination at the Acme Steel Coke Plant. Figure 7 of this report shows the sources of contamination.

#### 5.1.1 Tar Impoundment

The Tar Impoundment source is a surface impoundment that contained what appeared to be coal tar and potentially some other coke plant by-products at the time of CA field operations. The Tar impoundment was visible in aerial photographs beginning in 1986 and the size and shape remained the same until the time of the ESI in 2010. The waste material in the Tar Impoundment looked and smelled very similar to coal tar.

Waste sample X307 was collected from near the center of the impoundment during the CA. Significant quantities of benzene and several semi-volatile organic compounds were identified through laboratory analysis of sample X307. Concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)flouranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were all greater than U.S. EPA Removal Action Levels. A global positioning system was used to delineate the perimeter and area of the tarry material. Based on the GPS data, the perimeter of the Tar Impoundment was determined to be 303.8 meters, and the area covered by the impoundment (as determined by the presence of tar) was 17,228 square feet, or 0.40 acres.

#### 5.1.2 French Drain and Sump

The French Drain and Sump source is considered as an "other" source type in accordance with HRS (USEPA, Guidance). The French Drain and Sump source is the known extent of the buried

French Drain system. Historical information about the facility indicated that French drain was directed into a sump that was pumped from time to time. No information is available regarding disposal of the waste from the sump or exactly where the sump was/is physically located. When the plant was in operation the French Drain collected surface water run-off, shallow groundwater infiltration, and potentially piping from manholes inside process building and in the general areas outside of the buildings.

Sample X302 was obtained from one of the "clean-out" riser pipes from the French Drain system during the CA. Contaminant concentrations observed in the French Drain as represented by X302 contain elevated concentrations (greater than RALs for industrial soils) for benzo(a)pyrene. The "French Drain and Sump" source was determined to be 496 feet long and 3 feet wide.

#### 5.1.3 Process Waste Pile

The Process Waste Pile source is a considered to be chemical waste pile for the purposes of HRS scoring. The Process Waste Pile source is characterized by coal fines, cinders and varying percentages of coal tar or other unidentified process wastes along with small percentages of other fill material such as limestone gravel or brick shards. The Process Waste Pile was placed throughout the facility presumably to fill in low-lying areas, to control surface water run-off, and possibly to control growth of vegetation surrounding the facility. The depth of the Process Waste Pile varies throughout the site as characterized by Geoprobe locations during the CA. The depth of fill material was determined to be at least 8 feet deep in all five Geoprobe locations and identified as deep as 11 feet below ground surface at the location identified as G105.

The extent of Process Waste Pile materials can be identified visually, as throughout most of the facility. However, to be conservative, the extent of Process Waste Pile is defined for the purposes of HRS scoring by samples with similar physical descriptions and the presence of the same contaminants. The samples which share physical and chemical characteristics can be connected by straight lines to determine the lateral extent of contamination Samples X301, X304, X306, X308, X309 collected during the CA were connected using straight lines to define the lateral extent of the Process Waste Pile. The area encompassed by the Process Waste Pile is 2,238,984 square feet, or 51.4 acres as determined by desktop GIS.

Laboratory results for samples X301, X304, X306, X308, X309 are similar. Although the samples contain varying degrees of contamination, they share similar constituents. The presence of

several contaminants including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene (some at concentrations greater than USEPA RALs) link the samples and areas in-between as one contiguous source.

### 5.1.4 Facility Trench and Discharge Line

The Facility Trench and Discharge Line source is considered as an "other" source type in accordance with HRS. The trench was identified visually during both the CA and ESI investigations. The source is a combination of brick and concrete-lined trenches and an underground network of pipes conveying storm water, non-contact cooling water, and other process waters through Outfall #3 and into the Semet-Solvay slip. Facility plan maps of the trench system were geo-rectified using desktop GIS and uploaded to GPS for use in the field during the ESI. Field staff verified the trench and piping locations as presented on the plan map.

During the CA, the northern portion of the trench system along with the discharge line leading into the Semet Solvay Slip was investigated. Sample X206 obtained from the open trench just west of Light Oil process building and sample X205 obtained from Outfall#3 represent waste material prior to being directed underneath South Torrence Avenue and in a northeast direction towards the Semet-Solvay Slip. (At the slip, the wastewater is released into the environment through a large-diameter metal pipe.) During the ESI, waste samples X316 – X320 were collected from the bottom of the trench throughout the central portion of the facility.

Waste materials from the trench were consistent among all the samples and described as black slag, cinders, and organic liquid with a coal tar odor. Contaminant concentrations observed in the Trench and Discharge Line as represented by sediment/waste samples X206, X207, X316, X317, X318, X319, and X320 contain elevated concentrations for many of the same contaminants including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. As determined by field observations and desktop GIS, Facility Trench and Discharge Line source was determined to be 3026 feet long and approximately 3 feet wide throughout the facility.

#### 5.2 Pathway Analysis

The Office of Site Evaluation identifies three migration pathways and one exposure pathway, as identified in CERCLA's Hazard Ranking System, by which hazardous substances may pose threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

#### 5.2.1 Groundwater Pathway

The Groundwater pathway evaluates aquifers that underlie a source or contain contaminants attributable to the site. No off-site groundwater or drinking water samples have been collected in the SR or previous CERCLA investigations. Seven Geoprobe borings were conducted on the facility as a part of the CA fieldwork. Material consistent with the Process Waste Pile source was below the water table of the shallow aquifer beneath the site. Geoprobe ground water samples were obtained during the CA at five separate locations. Benzene was identified in several waste samples throughout the site and was also identified in 3 out of 5 Geoprobe groundwater sampling locations, at concentrations between 7 and 370 ug/L (the MCL for benzene is 5 ug/L). None of the four sources identified during past investigations have liners or any other containment features that would control migration of contaminants from the surface wastes into groundwater.

Research regarding groundwater use in 1990 identified only two residential wells using groundwater from the shallow unconsolidated deposits in a 39-square-mile area around the site (Cravens and Zahn). Cravens and Zahn's conclusions are bolstered by information from ISGS which identifies a total of 15 well records within 2 miles of the site, with all 15 wells having a recorded use of "commercial/industrial". The city of Chicago currently has an ordinance throughout the city that no new drinking water wells may be installed. The city of Chicago obtains its drinking water from surface water intakes located in Lake Michigan. The presence of groundwater at relatively shallow depths increases the likelihood of close interaction between groundwater and surface water in the area.

The flow direction of ground water in the unconsolidated deposits of the Lake Calumet area are connected to surface waters, streams, rivers, lakes, and wetlands (Craven and Zahn). However, Craven and Zahn note that the shallow ground water flow has been highly altered

from its original state due to the large amount of fill material brought into the area. Groundwater flow direction in the unconsolidated aquifer beneath the Acme Steel Coke Plant is unknown, however studies performed at the Interlake property note that flow direction is generally to the southwest (Illinois EPA, Interlake ESI).

#### 5.2.2 Surface Water Pathway

This migration pathway discusses the hazardous substance migration path of the Overland Flow/Flood Component of the Surface Water Pathway. Contamination migration from the site has been documented both to the northeast to the Semet-Solvay slip of the Calumet River, and to the south to the Indian Ridge Marsh.

#### 5.2.2.1 Semet-Solvay Slip

The primary pathway of contaminants into the Semet-Solvay Slip is by way of surface water runoff which enters into the Facility Trench on the site which is directed into Outfall#3 and then to the Semet-Solvay slip on the Calumet River. Information in Illinois EPA's files also indicate that some process waters may flow into the Trench due to historical storm water/sanitary sewer cross-connections in the system that were never corrected (Sloat). Lastly, surface water run-off that flows off the facility onto Torrence Avenue (east of the site) flows into manholes in the roadway that reportedly discharge into the Calumet River.

Contaminants associated with Coking operations were identified at several points within the Trench that could be directly linked to the surface water pathway and concentrations observed in sediments in the Semet-Solvay slip. Semi-volatile concentrations in samples X206 and X205 collected during the CA and samples X316, X317, X318, X319, and X320 document contamination in the Trench that discharges to the Semet-Solvay slip by way of Outfall#3. Contamination in the Semet-Solvay slip (as documented by sediment sample X207) begins the 15-mile in-water segment of the surface water pathway as identified in HRS scoring procedures (USEPA, Guidance). Figure 9 of this report identifies the PPE and 15-mile target distance limit.

Contamination in the slip beginning at the PPE, would flow 330 meters to the confluence with the Calumet River. Once in the Calumet River, flow travels south for approximately 4,300 meters where a portion of the river flows into Lake Calumet. The Calumet Rivers continues in a southerly direction for approximately 2,300 meters where it joins with the Grand Calumet River and becomes the Little Calumet River. The Little Calumet River which in turn continues in a

southwesterly direction for about 800 meters before meandering west through several Chicago suburbs. The 15-mile target distance limit, located just west of Robbins, Illinois ends the in-water segment.

The Calumet River has been identified as a Fishery by the Illinois Department of Natural Resources and is used for recreational purposes (Illinois EPA, Wisconsin ESI). In addition, fishing equipment was found within several feet of sediment sample X207, confirming that individuals are fishing in the area. The National Wetland Inventory Map for the area identifies a wetland adjacent to the Little Calumet River within 9,000 meters of the PPE for the site (U.S. DOI). The wetland has approximately 1,000 meters of frontage on the river and is identified as a Palustrine forested wetland that is temporarily flooded (U.S. DOI). The area encompassed by the wetland is estimated at approximately 58 acres (U.S. DOI; USGS).

#### 5.2.2.2 Indian Ridge Marsh

Surface water runoff from the Coke Plant is drained onto adjacent properties by two water control structures identified in Chicago's Department of Environment's Calumet Hydrologic Master Plan. The structures are: a 12-inch diameter culvert that drains the southwest portion of the site westward beneath the railroad tracks into surface water located at Big Marsh; and, a 36-inch culvert that drains the southwest corner of the Coke Plant southward under 116<sup>th</sup> Street into Indian Ridge Marsh and associated wetlands. Both of these structures flow out of the ditch running north and south immediately west of the facility and east of the railroad tracks. In consideration of the track construction methods, the north-south ditch (or at least a depression) would have existed between the tracks and the facility since its inception. The north-south ditch is still present and the culvert running beneath 116<sup>th</sup> Street provides a continual conduit of for surface water runoff from the site into Indian Ridge Marsh.

General topography of the facility shows a gradual slope toward the southwest. Surface water run-off without man-made control features would flow into the low-lying area of Indian Ridge Marsh. Coke Plant operations and on-site features such as railroad tracks, on-site ponds, and piles of either coal, cinders, or slag appear to have altered the natural flow direction.in one way or another over the years. Topographic maps produced by USGS from 1929, and 1953 show on-site tracks traveling on the west, south, and eastern edges of the facility, forming what may have been a barrier to the majority of southern surface water run-off during the early years of operation. An aerial photograph of the facility from 1938 shows water ponded on the

southeastern corner of the facility which may have been the result of run-off control the south. A 1963 USGS topographical map shows that the on-site railroad tracks are discontinuous on the facility's southern border and markings show the presence of wetland areas in the south-central region of the Coke Plant. The 1991 edition of the USGS topographical map depicts a perennial waterway on the facility beginning in the central region and flowing southwesterly through on-site wetlands directly into Indian Ridge Marsh. Maps produced by USGS depict the perennial water way as being present in map editions following 1991 and through 2018. The culvert running under 116<sup>th</sup> Street between the facility and Indian Ridge Marsh would provide a continuous connection between the perennial waterway and depicted on the topographic maps and Indian Ridge Marsh.

Site reconnaissance conducted between 2005 and today indicate that waste materials piled in the southwestern portion of the site have blocked what once was a perennial waterway from the central portion of the facility into Indian Ridge Marsh. However, surface water drainage from the extreme southwestern corner of the facility into the north-south ditch are believed to have remained constant. Additionally, surface water runoff from portions of the facility towards the west and into the north-south ditch continue. Soil and sediment samples collected during the SR document both the flow from the facility and into the ditch in the central portions of the site as well as run-off leaving the facility in the southwestern corner. Samples X226 and X225 document observed releases of fourteen SVOC compounds into the north-south ditch from western portion of the facility. Similar compounds meeting observed release criteria we identified in sample X224 representing flow form the southwestern corner of the facility into the ditch. Semi-volatile constituents in sample X223 collected from the north-south ditch south of 116<sup>th</sup> street and north of Indian Ridge Marsh documents continued contamination from the site by way of the ditch into the Marsh. Finally, laboratory results showing observed release of SVOCs in sediment samples X223 and X222 collected from in marsh document an observed release into an isolated wetland.

The overland flow pathway begins at sample location X226 and continues approximately 3,100 feet southward before reaching sediment sample location X222 which represents the Probable Point of Entry (PPE). The Target Distance Limit would be the furthest downgradient point of the wetland, approximately 1,900 feet south of the PPE location. In accordance with U.S. Fish and Wildlife Service National Wetland Inventory Maps, the wetland in Indian Ridge Marsh is categorized as a Freshwater Emergent Wetland with a perimeter of 2,144 meters and covering

an area over 30.1 acres. Wetlands line the small stream adjacent to and downstream of the site (U.S. Department of Interior, 2017). Indian Ridge Marsh hosts a large nesting colony of blackcrowned night herons. The black-crowned night heron is on the Illinois Endangered Species list. The city of Chicago reported in 2005 that the marsh is "the largest nesting rookery for this species in the Upper Midwest; (with) approximately 800 black crowned night herons using the site. The marsh is a designated natural area as a part of the Chicago Park District.

#### 5.2.2.2.1 Attribution

Sediment samples collected during the reassessment document observed releases of SVOC compounds in the north-south ditch and downstream into the Indian Ridge Marsh. Similar SVOC compounds were found in sediment samples X225, X226, X223 and X222, attributing contaminants in the Indian Ridge Marsh to the Acme facility. The geographic location of the culvert (oriented north-south and running under 116<sup>th</sup> street) establish a connection between at minimum, the southwest portion of the Acme facility and the northwestern corner of the Marsh. Similarly, due to the shared boundary of the Acme facility and the marsh (separated only by 116<sup>th</sup> Street), the northern regions of the marsh away from the northwestern corner may be impacted by shallow groundwater and springs within the marsh (Illinois EPA, Addendum). (Hydrogeologic studies of the area documented shallow groundwater flow from surrounding lands with higher elevation into the marsh [Illinois EPA, Addendum]). Although historical investigations of the nearby Lake Calumet Cluster site also documented SVOC impacts to the Marsh, these impacts were primarily by overland flow (through a culvert) into regions of the marsh south of the initial impacts from Acme (Illinois EPA, Addendum). (The culvert was identified approximately 1300 feet south of 116<sup>th</sup> Street during a field event conducted in 2004 [in preparation for the potential listing of the LCC site].) During the 2004 field event, extensive sediment sampling was conducted in the Indian Ridge Marsh and samples were shipped off-site for semi-volatile analysis and other parameters. The analysis documented attribution of SVOC contamination from the LCC site into primarily the westcentral and southern regions of the Indian Ridge Marsh (Illinois EPA, Addendum). Figure 10 of this report displays SVOC concentrations in sediments in Indian Ridge Marsh from both the 2004 Illinois EPA investigation along with those from the 2018 reassessment. Greater concentrations of SVOC compounds in the northern region of the Marsh (where impacts from the Acme facility are the expected to be more significant) support attribution from at least the Acme facility, if not both Acme and the LCC site.

### 5.2.3 Soil Exposure

The Soil Exposure Pathway evaluates threats to individuals and sensitive environments exposed to surficial contamination at the site (both on or off the facility). The surface of almost the entire facility is covered with coal fines, cinders and varying percentages of coal tar or other unidentified process wastes and is identified as the Process Waste Pile within the report. To be conservative, the extent of surficial contamination (the Process Waste Pile) at the facility it is defined by the area contained within Samples X301, X304, X306, X308, X309. Figure 7 identifies the aerial extent of surficial contamination at the site. The area of surface contamination encompasses 51.4 acres. The site is fenced although it has been cut in several locations and trespassers have been sighted on the property. There are currently no residents or individuals who could be characterized as workers on-site.

The waste present at the surface of the site at the facility was placed there by Acme and its predecessor, Interlake. It is assumed that the materials were spread throughout the property to control vegetation and surface water run-off. Additionally, Interlake owned and operated the property to the west of the facility, and also placed waste of similar characteristics on the land surface in certain areas (Illinois EPA, Wisconsin ESI).

Approximately 6, 235 people reside within one mile of the facility. No residential samples were taken as a part of the SR or past CERCLA investigations. The table below identifies the number of residents within certain distances of the site.

Distance in Miles	Population
0 - 1/4	560
1/4 - 1/2	1821
1⁄2 - 1	3,854
Total	6,235

#### 5.2.4 Air Migration Pathway

No air samples were collected during CERCLA investigations. There are no records, reports, or complaints of air releases from the site. Based on the analytical results of soil and waste material samples collected during previous investigations, the potential for wind to carry particulates off the property is possible. In addition, due to sparse vegetation in many areas of

the site, any traffic over such areas raise dust when dry. The nearest resident to the site is 800 feet to the north-northeast. There are no employees currently working at the site.

### 6.0 SUMMARY AND CONCLUSION

The Acme Steel Coke Plant site is the former location of a coking facility located in south side of Chicago, in Cook County Illinois. The Calumet River and Lake Michigan are 0.3 miles and 2.83 miles east of the site, respectively. The site consists of approximately 104 acres.

The coke plant began to shut down its operations in October of 2001 following bankruptcy. Following its closure, several entities have been involved in the salvage and demolition of onsite structures. Illinois EPA's Office of Site Evaluation completed a CA for the site in 2004, conducted field work for an Expanded Site Inspection (ESI) in 2010, and a Site Reassessment (SR) in 2018. The results of the 2010 and 2018 sampling are discussed in this Site Reassessment report. Waste samples collected from the facility identified the presence of significant concentrations of Semi-volatile Organic Compounds (SVOCs), exceeding U.S. EPA's Removal Management Levels (RMLs) in a few cases.

During many years of operation, the facility discharged process wastewater to the Semet-Solvay slip located northeast of the site on the Calumet River. Sediment samples collected in both the slip and the river itself during the 2010 ESI met Observed Release Criteria for several SVOCs. The most recent CERCLA investigation (the Site Reassessment) focused on sediment sampling evaluating impact from surface water runoff to the south and into Indian Ridge Marsh and the results are reported within this SR report. During the SR six soil samples were obtained from the north-south ditch bordering the facility to the west and two sediment samples were collected from Indian Ridge Marsh. Concentrations of SVOCs meeting observed release criteria were identified in every release sample collected. Soil sample concentrations in the ditch upgradient of the marsh documented the overland flow route and both samples collected in marsh sediments documented a release to surface water and an isolated wetland.

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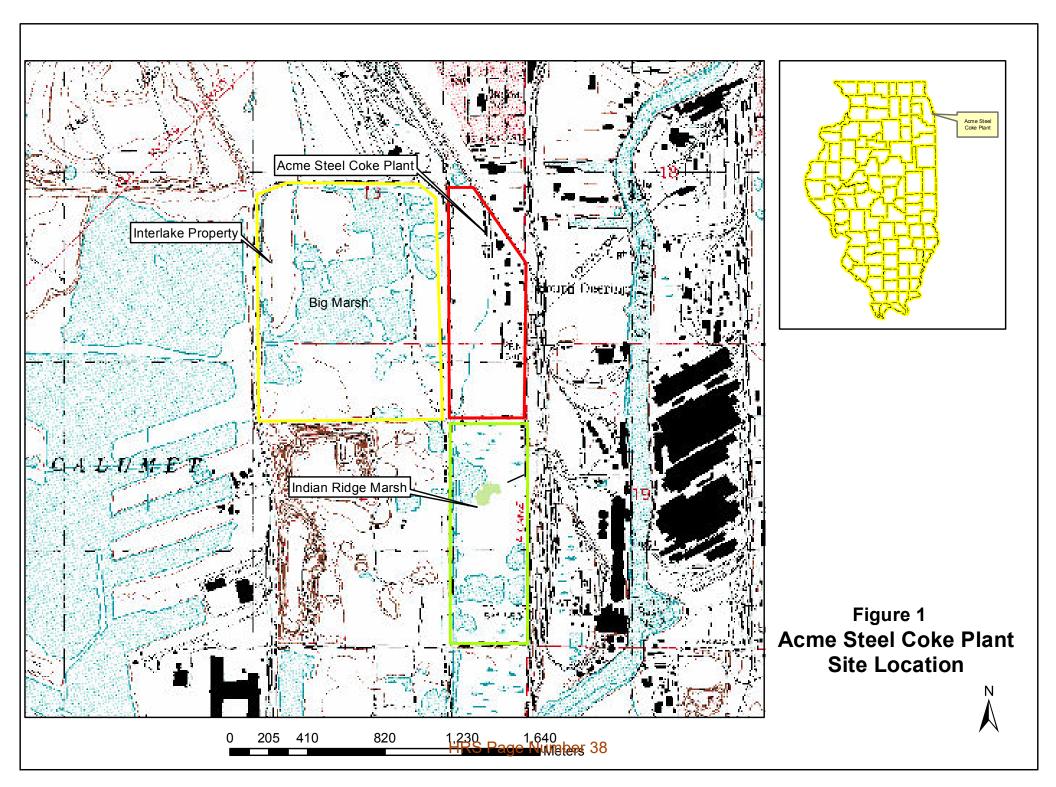
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# Figures





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### Figure 3 Acme Steel Coke Plant

Combined Assessment Waste and Sediment Sampling Locations



50 100

0

200

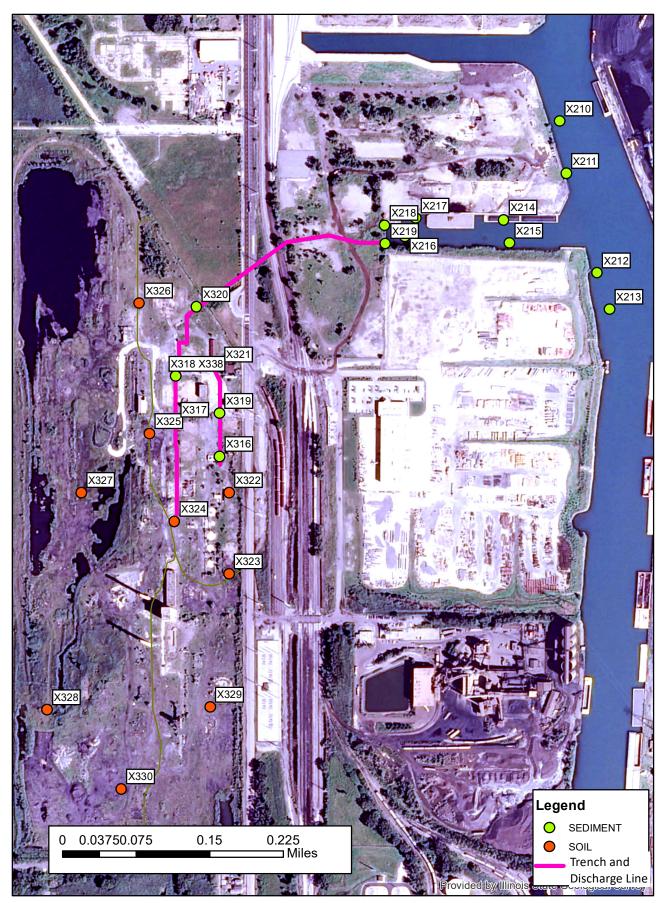
300

Sediment Sample Locations
 Facility Boundary
 HRS Page Number 40

400 Meters

### Figure 4 Acme Steel Coke Plant

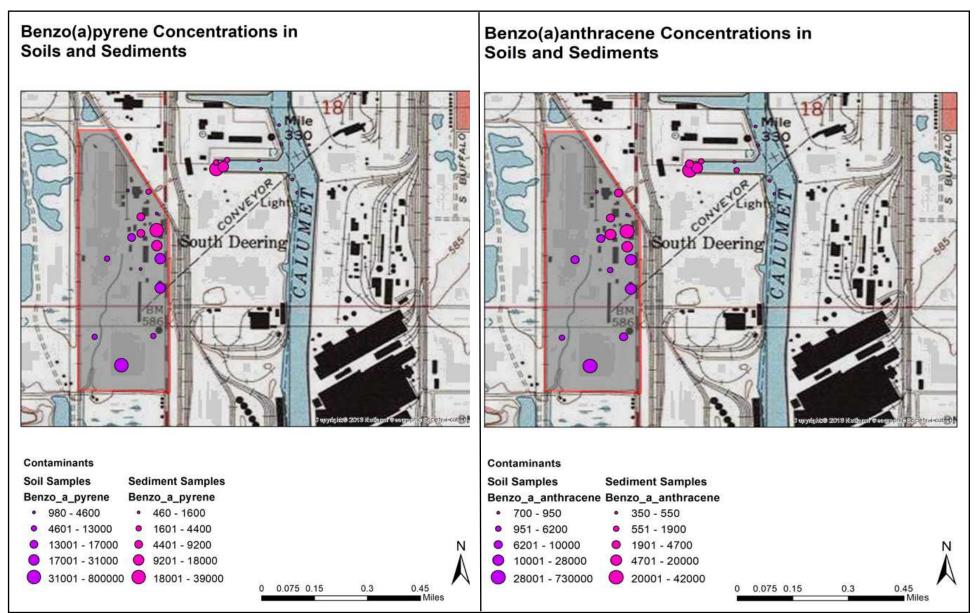
Expanded Site Inspections Sampling Locations



Note: Sediment samples 208 and 209 were colleced in the Calumet River approximately 2.2 miles upstram of Sample X210

### FIGURE 5

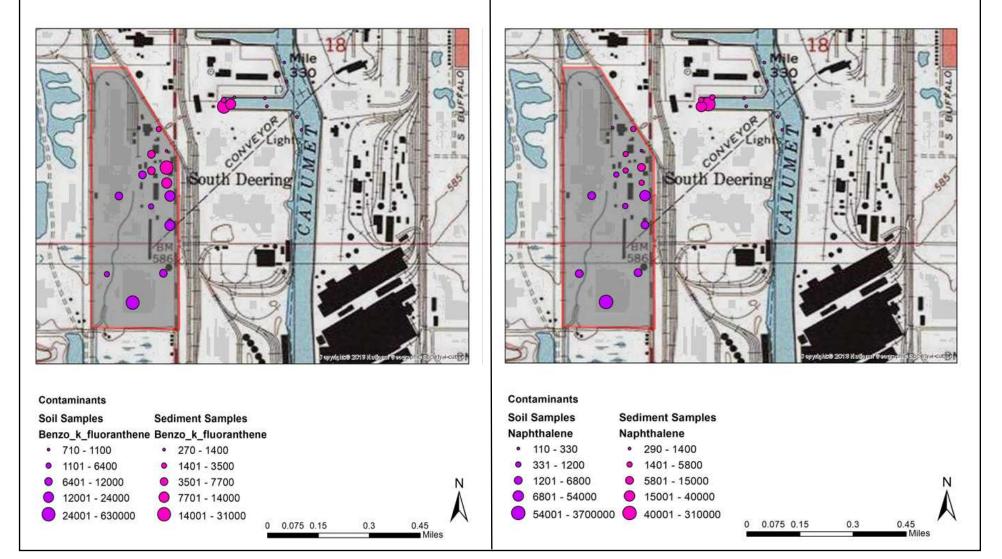
#### **ESI Concentrations in Soils and Sediments**



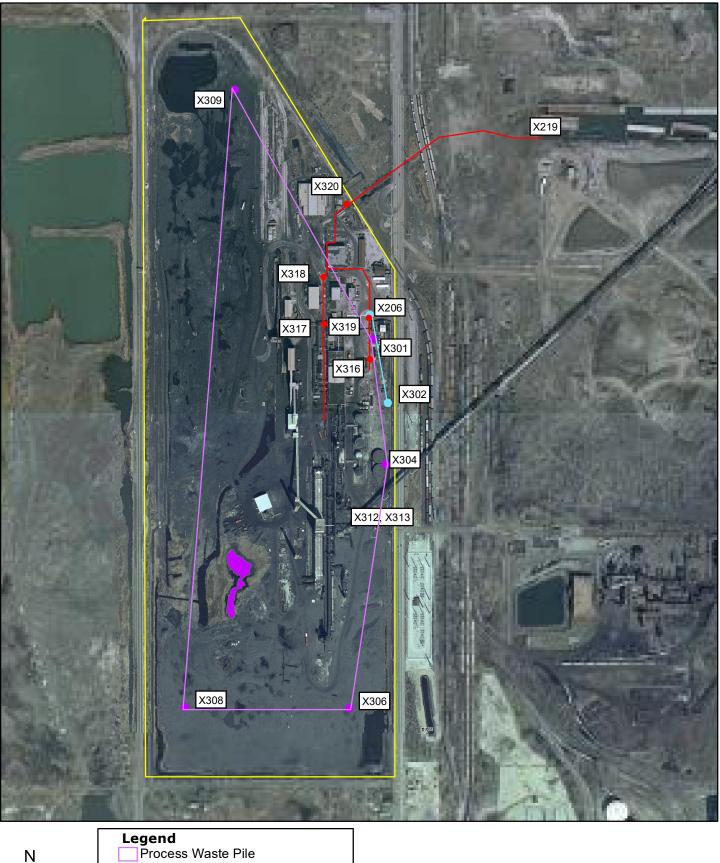
#### FIGURE 6 ESI Concentrations in Soils and Sediments

## Benzo(k)flouranthene Concentrations in Soils and Sediments





### Figure 7 Acme Steel Coke Plant HRS Source Identification Map



Process Waste Pile
 French Drain and Sump
 Tar Impoundment
 Facility Trench and Discharge

Facility Boundary
Facility Bou

200

300

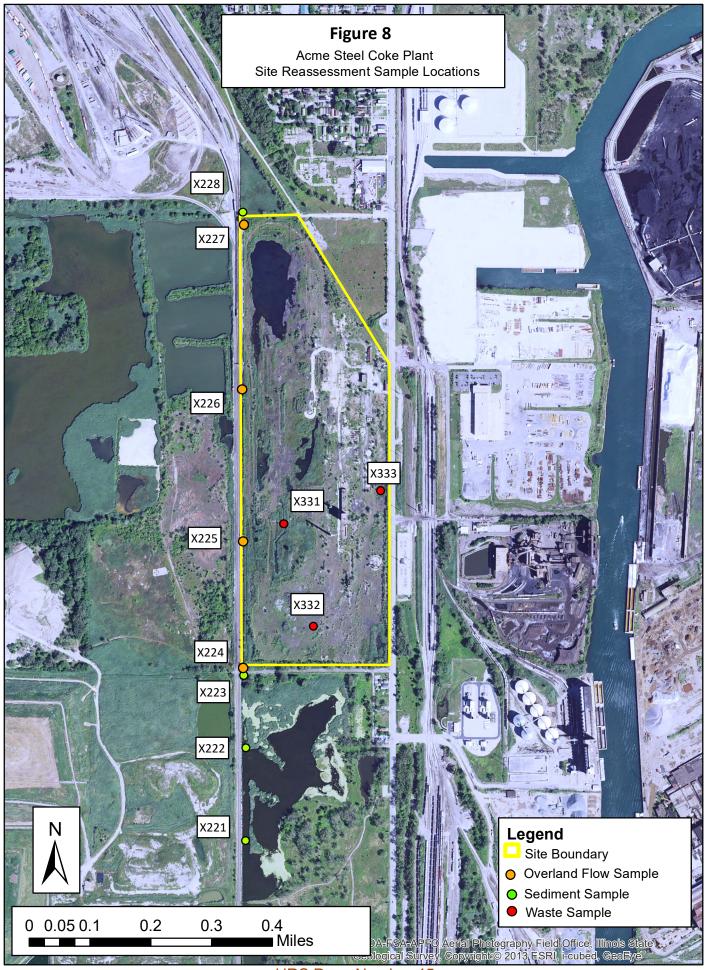
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Meters

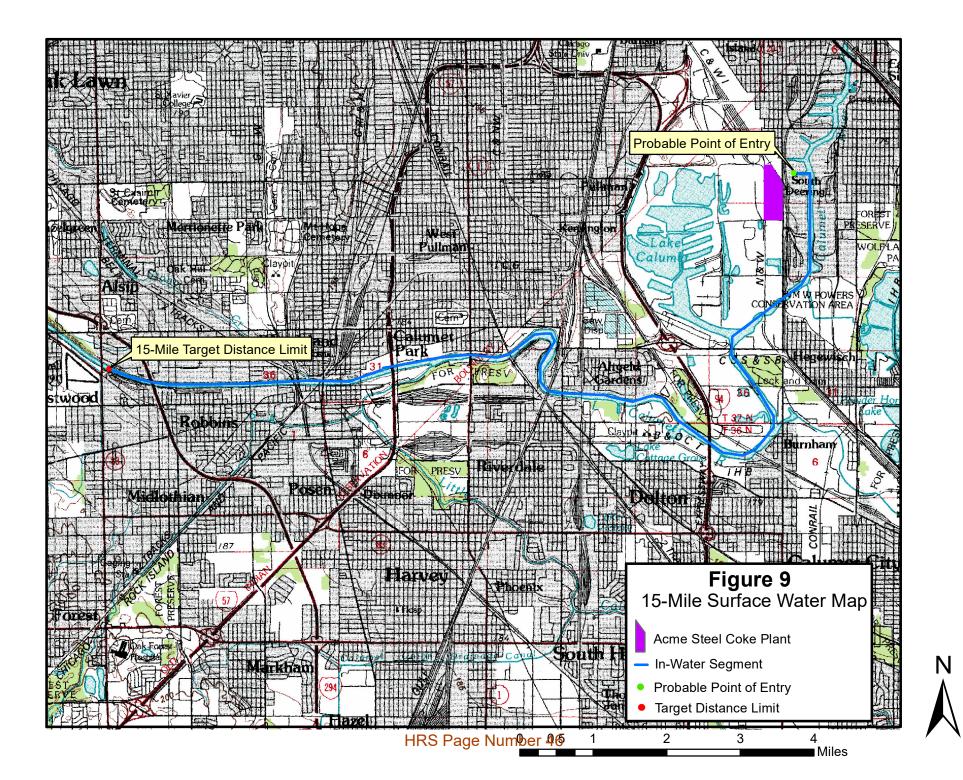
100

50

0



<sup>&</sup>lt;del>HRS Page Number 45</del>





## Tables

## Table 1Sample Information

Sample	Туре	Sample / Location Description	Analysis *
X221	Sediment	Collected from Indian Ridge Marsh approximately 1,400 feet south of the culvert draining the southwest corner of the Coke Plant. Sampling location approximately 35 feet east of railroad tracks. Water at location is approximately 18 – 24" deep. Sample X221 collected from <b>12 – 18"</b> <b>beneath sediment surface</b> . Sampled <b>soft black silt</b> <b>with gray hue</b> , resting on top of stiff layer assumed to be more clayey. No chemical odor noted. Sampled with stainless steel auger and trowel.	TM, VOC, SVOC, PEST/PCB
X222	Sediment	Collected from Indian Ridge Marsh approximately 630 feet south of the culvert draining the southwest corner of the Coke Plant. Sampling location approximately 40 feet east of railroad tracks. Water at location is approximately 18" deep. Sample X222 collected from <b>6 - 12" beneath</b> <b>sediment surface</b> . Sampled soft to <b>medium black silt</b> <b>with low percentage sand</b> , resting on top of stiff layer assumed to be more clayey. No chemical odor noted. Sampled with stainless steel auger and trowel.	TM, VOC, SVOC, PEST/PCB
X223	Sediment	Sediment sample X223 was collected from ditch approximately 8 feet south of the culvert draining the southwest corner of the Coke Plant. Culvert runs north and south beneath western terminus of 116 <sup>th</sup> Street. Sampling location approximately 40 feet east of railroad tracks. Approximately 6"of water ponded at location. Sample X223 collected from <b>6 - 12" beneath sediment</b> <b>surface</b> . Sample consisted of soft to <b>medium black silt</b> <b>with low percentage sand</b> . Sample had strong natural organic smell. Sampled with stainless steel auger and trowel. Vegetation in area was sparse but some roots noted in sediment.	TM, VOC, SVOC, PEST/PCB
X224	Sediment	Sediment sample X224 intended to represent sediments prior to where surface water drains into north side of the culvert draining the southwest corner of the Coke Plant. Culvert runs north and south beneath western terminus of 116 <sup>th</sup> Street. Recently it appears that a truckload of railroad ballast had been dumped in the area covering the north opening of the culvert. Sampling location approximately 20 feet north of approximate location of culvert opening. Rudimentary erosion control consisting of telephone poles and used tires had been constructed decades earlier in apparent attempt to keep waste material from eroding off the site. Sample X224 collected on the east side wall of the ditch from <b>5 - 10</b> " beneath sediment surface. Sampled contained black loam with slag fines. Sampled with stainless steel trowel.	TM, VOC, SVOC, PEST/PCB
X225	Sediment	Sediment sample X225 collected from the eastern opening of culvert running westward beneath the railroad tracks and into surface water feeding Big Marsh. Sample collected from <b>4" beneath the sediment surface</b> of sediments accumulated inside the opening of the culvert. Material sampled was <b>black loam with roots</b> . Sample collected with stainless steel trowel.	TM, VOC, SVOC, PEST/PCB

Sample	Туре	Sample / Location Description	Analysis *
X226	Sediment	Sediment sample X226 collected from a low-lying area adjacent to the ditch running north and south along the western border of the Coke Plant property. The ditch is much less defined in this area and becomes more of a depression. Sample collected approximately 6 feet west of the fence surrounding the facility. Sample collected from <b>12</b> " <b>below ground surface</b> with a stainless-steel trowel. Material sampled was <b>black/dark brown silty</b> <b>loam with small amount of roots</b> .	TM, VOC, SVOC, PEST/PCB
X227	Sediment	Sample X227 collected at the northwestern corner of the Coke Plant within the surface water drainage route flowing southward along the property's western edge. Location intended to represent conditions within the drainage route prior to impacts from the facility. Sample collected from low-lying area west of the facility fence and approximately 60 feet east of the railroad tracks. Sample collected from <b>3 - 8" below ground surface</b> with a stainless-steel trowel. Material sampled was <b>black/dark brown loam</b> <b>with low percentage sand</b> . Roots present in material sampled. No slag or site impacts noted. Wetland species noted in immediate vicinity.	TM, VOC, SVOC, PEST/PCB
X228	Sediment	Sample X228 collected from low-lying area north of the Coke Plant's northern boundary within the surface water drainage route flowing southward along the property's western edge. Location intended to represent background conditions. Sample collected from low-lying area on the western edge of the wetland located here that appears to drain southward. Sample collected from <b>3" below</b> <b>ground surface</b> with a stainless-steel trowel. Material sampled was <b>black/dark brown loam with low</b> <b>percentage sand</b> . Roots present in material sampled. No slag or site impacts noted. Phragmites/wetland species to east noted in immediate vicinity. Railroad ballast, trees and some slag located to the west of sampling location.	TM, VOC, SVOC, PEST/PCB
X230	Sediment	Duplicate of X224	TM, VOC, SVOC, PEST/PCB
X331	Waste	Waste sample X331 collected in west-central portion of site at the beginning of drainageway that once flowed south and then off-site into Indian Ridge Marsh. Sample area is covered by phragmites growing out of slag fines and cinders with some loam. Sample collected at the base of a concrete wall defining the western edge of the drainageway from $0 - 3$ " BGS. Material sampled was cinders and possibly slag fines mixed with low percentage of dark brown/black loam. Collected with stainless steel trowel.	TM, VOC, SVOC, PEST/PCB
X332	Waste	Waste sample location X332 collected in south-central portion of site where high concentrations of SVOCs identified in previous sampling events. Surface of site in the area covered with tar spots, slag pieces and associated fines. Sample X332 obtained with stainless steel trowel from 2 - 4" in black slag fines and small slag pieces.	TM, VOC, SVOC, PEST/PCB
X333	Waste	Collected approximately 15' south of historic tank location in eastern portion of facility. Sample X333 obtained with stainless steel trowel from <b>0 - 6" in cinders and slag</b> <b>fines</b> .	TM, VOC, SVOC, PEST/PCB

TM - Total Metals VOC - Volatile Organic Compounds SVOC – Semi-volatile Organic Compounds PEST/PCB – Pesticides and Polychlorinated Biphenyl Compounds

\*

# TABLE 2Acme Steel Coke PlantExpanded Site InspectionSediment and Waste Analytical ResultsVolatile Organic Compounds (ug/Kg)

Location	X211		X210		X212		X213		X214		X215		X216		X217		X218		X219	
Matrix	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	_
Volatile Compound	Result	Ŭ	Result	Ŭ	Result	Ŭ	Result	Ŭ	Result	Ŭ		Flag	Result	0	Result	Ŭ	Result	, i		Ŭ
Dichlorodifluoromethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Chloromethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Vinyl chloride	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Bromomethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Chloroethane	9.6	U	9.3	U 	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Trichlorofluoromethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,1-Dichloroethene	9.6	U	9.3	UJ	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,1,2-Trichloro-1,2,2-trifluoro		U	9.3	UJ	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Acetone	41		40	UJ	54		110		48		46		90		50		84		57	
Carbon disulfide	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Methyl acetate	9.6	U	9.3	UJ	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Methylene chloride	9.6	U	9.3	U	20	U	100	U	20	U	19	U	96	U	88	U	89	U	69	U
trans-1,2-Dichloroethene	9.6	U	9.3	U 	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Methyl tert-butyl ether	9.6	U	9.3	UJ	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,1-Dichloroethane	9.6	U	9.3	UJ	10	U	10	U	10	U	19	U	9.6	U	8.8	U	8.9	U	6.9	U
cis-1,2-Dichloroethene	9.6	U	9.3	J	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
2-Butanone Bromochloromethane	19 9.6	U U	19 9.3	U U	20 10	UU	32 10	U	20 10	U U	19 9.4	UU	19 9.6	U U	18 8.8	UU	18 8.9	U U	14 6.9	UU
Chloroform	9.6	U	9.3	0	10	U	10	U	10	U	9.4 9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,1,1-Trichloroethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Cyclohexane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	40	J	8.8	U	8.9	U	4.9	J
Carbon tetrachloride	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Benzene	9.6	U	9.3	UJ	10	U	10	U	10	U	9.4	U	47	J	8.8	U	8.9	U	240	Ŭ
1.2-Dichloroethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,4-Dioxane	190	U	190	0	200	U	200	U	200	U	190	UJ	190	U	180	U	180	U	140	U
Trichloroethene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Methylcyclohexane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	150	J	8.8	U	13	•	16	
1,2-Dichloropropane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Bromodichloromethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
cis-1,3-Dichloropropene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
4-Methyl-2-pentanone	19	U	19	U	20	U	20	U	20	U	19	U	19	U	18	U	18	U	14	U
Toluene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	20	J	8.8	U	8.9	U	35	-
trans-1,3-Dichloropropene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	υ	8.9	U	6.9	U
1,1,2-Trichloroethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Tetrachloroethene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
2-Hexanone	19	U	19	U	20	U	20	U	20	U	19	U	19	U	18	U	18	U	14	U
Dibromochloromethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,2-Dibromoethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Chlorobenzene	9.6	U	9.3	υ	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Ethylbenzene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	140	J	8.8	U	8.9	U	180	
o-Xylene	9.6	U	9.3	υ	10	U	10	U	10	U	9.4	U	78	J	8.8	U	8.5	J	130	
m,p-Xylene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	78	J	8.8	U	6.8	J	120	
Styrene	9.6	U		U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
Bromoform	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	R	8.8	U	8.9	U	6.9	U
Isopropylbenzene	9.6	U	9.3		10	U	10	U	10	U	9.4	U	14	J	8.8	U	4.5	J	13	
1,1,2,2-Tetrachloroethane	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	U	8.8	U	8.9	U	6.9	U
1,3-Dichlorobenzene	9.6	U		U	10	U	10	U	10	U	9.4	U	9.6	R	8.8		8.9	U	6.9	U
1,4-Dichlorobenzene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	R	8.8	U	8.9	U	6.9	U
1,2-Dichlorobenzene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	R	8.8	U	8.9	U	6.9	U
1,2-Dibromo-3-chloropropar	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6	R	8.8	U	8.9	U	6.9	U
1,2,4-Trichlorobenzene	9.6	U	9.3	U	10	U	10	U	10	U	9.4	U	9.6		8.8	U	8.9	U	6.9	U
1,2,3-Trichlorobenzene	9.6	U	9.3		10	U	10	U	10	U	9.4	U	9.6	R	8.8	U	8.9	U	6.9	U

# TABLE 2Acme Steel Coke PlantExpanded Site InspectionSediment and Waste Analytical ResultsVolatile Organic Compounds (ug/Kg)

Location	X316		X317		X318		X319		X320		X321		X322		X324		X325		X326	
Matrix	Waste		Waste		Waste		Waste		Waste		Waste		Waste		Waste		Waste		Waste	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Chloromethane	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Vinyl chloride	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Bromomethane	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Chloroethane	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Trichlorofluoromethane	7.6	U	7	U	8.8	UJ	8.9	U	7.1	U	5.9	U	5.3	UJ	5.7	R	5.8	R	5.6	U
1,1-Dichloroethene	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
1,1,2-Trichloro-1,2,2-trifluoro	7.6	U	7	U	8.8	UJ	8.9	U	7.1	U	5.9	U	5.3	UJ	5.7	UJ	5.8	U	5.6	U
Acetone	38		14	U	26		300		14	J	11	J	17		36	J	12	R	7.3	J
Carbon disulfide	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
Methyl acetate	7.6	U	7	U	8.8	UJ	8.9	U	7.1	U	5.9	U	5.3	UJ	5.7	UJ	5.8	R	5.6	U
Methylene chloride	15	U	14	U	8.8	UJ	18	U	14	U	30		11	UJ	39	J	16	J	11	U
trans-1,2-Dichloroethene	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Methyl tert-butyl ether	7.6	U	7	U	8.8	UJ	8.9	U	7.1	U	5.9	U	5.3	UJ	5.7	R	5.8	R	5.6	U
1,1-Dichloroethane	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
cis-1,2-Dichloroethene	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
2-Butanone	15	U	14	U	18	U	130		14	U	12	U	11	U	11	U	12	U	11	U
Bromochloromethane	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
Chloroform	7.6	U	7	U	8.8	U	8.9	U	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
1,1,1-Trichloroethane	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	UJ	5.7	UJ	5.8	U	5.6	U
Cyclohexane	7.6	U	7	U	8.8	R	49	J	7.1	U	5.9	U	4.5	J	5.7	UJ	5.8	U	5.6	U
Carbon tetrachloride	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	IJ	5.7	UJ	5.8	U	5.6	U
Benzene	7.6	U	7	U 	8.8	R	250	J	7.1	U	28	J	120	J	5.6	J	5.8	U	5.6	U
1,2-Dichloroethane	7.6	U	7	U	8.8	UJ	8.9	U	7.1	U	5.9	U	5.3	UJ	5.7	UJ	5.8	U	5.6	U
1,4-Dioxane	150	U	140	U	180	U	180	U	140	U	120	U	110	U	110	R	120	U	110	U
Trichloroethene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	U	5.7	R	5.8	R	5.6	U
Methylcyclohexane	7.6 7.6	U	7	UU	8.8	R R	120 8.9	J R	7.1 7.1	UU	5.9 5.9	UU	13 5.3	J	5.7	J U	4.5 5.8	J U	5.6 5.6	UU
1,2-Dichloropropane Bromodichloromethane	7.6	U	7	U	8.8 8.8	R	8.9	R	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
cis-1,3-Dichloropropene	7.6	U	7	U	0.0 8.8	R	8.9	R	7.1	U	5.9	UJ	5.3	UJ	5.7	UJ	5.8	UJ	5.6	U
4-Methyl-2-pentanone	7.0 15	U	14	U	0.0 18	R	0.9 18	R	14	U	5.9 12	U	5.5 11	U	5.7 11	U	5.0 12	U	5.6 11	U
Toluene	7.6	U	7	U	8.8	R	11	J	7.1	U	8.9	J	51	J	5.9	J	3.9	J	2.1	J
trans-1,3-Dichloropropene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	IJ	5.3	IJ	5.7	UJ	5.8	IJ	5.6	U
1,1,2-Trichloroethane	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	UJ	5.3	UJ	5.7	UJ	5.8	UJ	5.6	U
Tetrachloroethene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
2-Hexanone	15	U	14	U	18	R	18	R	14	U	12	U	11	U	11	U	12	U	11	U
Dibromochloromethane	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
1.2-Dibromoethane	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	UJ	5.7	UJ	5.8	U	5.6	U
Chlorobenzene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	5.3	U	5.7	U	5.8	U	5.6	U
Ethylbenzene	7.6	U	7	U	8.8	R	23	J	7.1	U	2.8	J	18	J	2.6	J	5.8	U	5.6	U
o-Xylene	7.6	U	7	U	8.8	R	15	J	7.1	U	2.7	J	73	J	3.1	J	5.8	U	5.6	U
m,p-Xylene	7.6	U	7	U	8.8	R	56	J	7.1	U	7.7	J	110	J	6.4	J	3.4	J	3.9	J
Styrene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	U	6.7	-	5.7	-	5.8	U	5.6	-
Bromoform	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9		5.3	R	5.7		5.8		5.6	
Isopropylbenzene	7.6	U	7	U	8.8	R	160	J	7.1	U	5.9		5.3		5.7		5.8		5.6	
1,1,2,2-Tetrachloroethane	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9		5.3		5.7		5.8		5.6	
1,3-Dichlorobenzene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9		5.3		5.7		5.8		5.6	
1,4-Dichlorobenzene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9		5.3		5.7		5.8		5.6	
1,2-Dichlorobenzene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9		7.2		5.7		5.8		5.6	
1,2-Dibromo-3-chloropropar	7.6	U	7	U	8.8	R		R	7.1	U	5.9		5.3		5.7		5.8		5.6	
1,2,4-Trichlorobenzene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	R	5.3	R	5.7	R	5.8	R	5.6	U
1,2,3-Trichlorobenzene	7.6	U	7	U	8.8	R	8.9	R	7.1	U	5.9	R	5.3	R	5.7	R	5.8	R	5.6	U

# TABLE 2Acme Steel Coke PlantExpanded Site InspectionSediment and Waste Analytical ResultsVolatile Organic Compounds (ug/Kg)

Location	X327		X328		X329		X330		X338	1
	Waste		Waste		Waste		Waste		Waste	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	6.3	U	5.4	U	6	U	5.3	R	9.4	U
Chloromethane	6.3	U	5.4	U	6	U	5.3	R	9.4	U
Vinyl chloride	6.3	U	5.4	U	6	U	5.3	R	9.4	U
Bromomethane	6.3	U	5.4	U	6	U	5.3	R	9.4	U
Chloroethane	6.3	U	5.4	U	6	U	5.3	R	9.4	U
Trichlorofluoromethane	6.3	U	5.4	U	6	U	5.3	R	9.4	UJ
1,1-Dichloroethene	6.3	U	5.4 5.4	U	6	U	5.3	R	9.4 9.4	U
1,1,2-Trichloro-1,2,2-trifluoro		U	5.4	U	6	U	5.3	R	9.4	UJ
Acetone	43	0	- 5.4 11	U	17	0	11	R	9.4 45	03
Carbon disulfide	6.3	U	5.4	U	6	U	5.3	R	9.4	U
		U	5.4 5.4	U	6	U		R		UJ
Methyl acetate	6.3	0		0	-	U	5.3		9.4	
Methylene chloride	14		12		24		59	J	9.4	UJ U
trans-1,2-Dichloroethene	6.3	U	5.4	U	6	U	5.3	R	9.4	-
Methyl tert-butyl ether	6.3	U	5.4	U	6	U	5.3	R	9.4	UJ
1,1-Dichloroethane	6.3	U	5.4	U	6	U	5.3	R	9.4	U
cis-1,2-Dichloroethene	6.3	U	5.4	U	6	U	5.3	R	9.4	U
2-Butanone	13	U	11	U	12	U	11	R	19	U
Bromochloromethane	6.3	U	5.4	U	6	U	5.3	R	9.4	U
Chloroform	6.3	U	5.4	U	6	U	5.3	R	9.4	U
1,1,1-Trichloroethane	6.3	U	5.4	U	6	U	5.3	U	9.4	R
Cyclohexane	6.3	U	5.4	U	6	U	6.4	U	9.4	R
Carbon tetrachloride	6.3	U	5.4	U	6	U	6.4	U	9.4	R
Benzene	6.3	U	5.4	U	6	U	5.5	J	9.4	R
1,2-Dichloroethane	6.3	U	5.4	U	6	U	6.4	U	9.4	UJ
1,4-Dioxane	130	U	110	U	120	U	130	U	190	U
Trichloroethene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
Methylcyclohexane	6.3	U	5.4	U	6	U	6.4	U	9.4	R
1,2-Dichloropropane	6.3		5.4	U	6	U	6.4	U	9.4	R
Bromodichloromethane	6.3	U	5.4	U	6	U	6.4	U	9.4	R
cis-1,3-Dichloropropene	6.3	UJ	5.4	UJ	6	U	6.4	U	9.4	R
4-Methyl-2-pentanone	13	U	11	U	12	U	13	U	19	R
Toluene	6.3	U	5.4	U	6	U	3.3	J	9.4	R
trans-1,3-Dichloropropene	6.3	UJ	5.4	UJ	6	U	6.4	U	9.4	R
1,1,2-Trichloroethane	6.3	UJ	5.4	UJ	6	U	6.4	U	9.4	R
Tetrachloroethene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
2-Hexanone	13	U	11	U	12	U	13	U	19	R
Dibromochloromethane	6.3	U	5.4	U	6	U	6.4	U	9.4	R
1,2-Dibromoethane	6.3		5.4		6	U	6.4	U	9.4	R
Chlorobenzene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
Ethylbenzene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
o-Xylene	6.3	U	5.4	U	6	U	2.6	J	9.4	R
m,p-Xylene	6.3	U	2.2	J	6	U	5.3	J	9.4	R
Styrene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
Bromoform	6.3	U	5.4	U	6	U	6.4	U	9.4	R
Isopropylbenzene	6.3		5.4		6		6.4		9.4	R
1,1,2,2-Tetrachloroethane	6.3	U	5.4	U	6	U	6.4	U	9.4	R
1,3-Dichlorobenzene	6.3		5.4		6		6.4	U	9.4	R
1,4-Dichlorobenzene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
1,2-Dichlorobenzene	6.3		5.4	U	6	U	6.4	U	9.4	R
1,2-Dibromo-3-chloropropar	6.3	U	5.4	U	6	U	6.4	U	9.4	R
1,2,4-Trichlorobenzene	6.3	U	5.4	U	6	U	6.4	U	9.4	R
1,2,3-Trichlorobenzene	6.3	U	5.4	U	6	U	6.4	U	9.4	R

# TABLE 3 Acme Steel Coke Plant Expanded Site Inspection Sediment and Waste Analytical Results Semi-volatile Organic Compounds (ug/Kg)

			1	-		ortatin	e e ge		Compo		e (a.g,.	-9/								
Location	X211		X210		X212		X213		X214		X215		X216		X217		X218		X219	
Matrix	Sedim ug/Kg	ient	Sedim	ent	Sedim	ent	Sedim	ent	Sedim ug/Kg	ent	Sedim ug/Kg	ent	Sedim ug/Kg	ent	Sedim	ent	Sedim	ent	Sedim ug/Kg	
Units Volatile Compound	Result	Flag	ug/Kg Result	Flag	ug/Kg Result	Flag	ug/Kg Result	Flag	Result	Flag	Result	Flag	Result	Flag	ug/Kg Result	Flag	ug/Kg Result	Flag	Result	
Benzaldehyde	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
Phenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	
Bis(2-chloroethyl)ether	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
2-Chlorophenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
2-Methylphenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
2,2'-Oxybis(1-chloropropane	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	
Acetophenone	330	U	310	U	340	U	350	U 	350	UJ	320	U 	320	U	300	U	300	U	240	U
4-Methylphenol N-Nitroso-di-n-propylamine	330 330	UU	310 310	U U	340 340	U U	350 350	U U	350 350	UJ UJ	320 320	U U	190 320	J	300 300	U U	300 300	U U	240 240	UU
Hexachloroethane	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	-
Nitrobenzene	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	-
Isophorone	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	
2-Nitrophenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
2,4-Dimethylphenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	UJ	300	U	300	U	240	UJ
Bis(2-chloroethoxy)methane	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
2,4-Dichlorophenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
Naphthalene 4-Chloroaniline	290 330	J	300 310	J U	360 340	U	510 350	U	790 350	J J	1400 320	U	##### 320	J	3700 300	U	5800 300	J	37000 240	J
4-Chioroaniline Hexachlorobutadiene	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
Caprolactam	330	UJ	310	UJ	340	U	350	UJ	350	UJ	320	UJ	320	UJ	300	U	300	UJ	240	
4-Chloro-3-methylphenol	330	U	310	U	340	U	350	U	350	UJ	320	U	320	U	300	U	300	U	240	U
2-Methylnaphthalene	330	UJ	130	J	340	U	150	J	250	J	180	J	30000	J	340	J	620	J	4000	J
Hexachlorocyclopentadiene	330	U	310	U	340	U	350	U	350	U	320	U	320	U	300	U	300	U	240	U
2,4,6-Trichlorophenol	330	U	310	U	340	U	350	U	350	U	320	U	320	U	300	U	300	U	240	
2,4,5-Trichlorophenol	330	U	310	U	340	U	350	U	350	U	320	U	320	U	300	U	300	U	240	U
1,1'-Biphenyl 2-Chloronaphthalene	330 330	UJ U	310 310	UJ U	340 340	U U	350 350	UJ U	350 350	UJ U	320 320	UJ U	2000 320	J	300 300	U U	140 300	J U	1800 240	J
2-Nitroaniline	650	U	610	U	660	U	690	U	670	U	620	U	630	U	590	U	590	U	460	-
Dimethylphthalate	330	UJ	310	UJ	340	U	350	UJ	350	UJ	320	UJ	320	UJ	300	U	300	UJ	240	
2,6-Dinitrotoluene	330	U	310	U	340	U	350	U	350	U	320	U	320	U	300	U	300	U	240	
Acenaphthylene	330	U	310	U	340	U	350	U	270	J	270	J	320	U	290	J	770		19000	J
3-Nitroaniline	650	U	610	U	660	U	690	U	670	U	620	U	630	U	590	U	590	U	460	U
Acenaphthene	330	U	310	U	340	U	350	U	170	J	360		47000	J	900		1400		5700	J
2,4-Dinitrophenol	650	U	610	U	660	U	690	U	670	U	620	U	630	U	590	U	590	U	460	
4-Nitrophenol	650	U	610	U	660	U	690	U	670	U	620	U	630	U	590	U	590	U	460	U
Dibenzofuran 2,4-Dinitrotoluene	330 330	UJ U	310 310	U U	340 340	UU	350 350	U U	170 350	J U	220 320	J U	22000 320	J	500 300	U	840 300	J U	12000 240	J
Diethylphthalate	330	UJ	310	UJ	340	U	350	UJ	350	UJ	320	UJ	320	UJ	300	U	300	UJ	240	UJ
Fluorene	330	UJ	310	U	340	U	350	U	250	J	290	J	29000	J	630	0	1300	J	20000	J
4-Chlorophenyl-phenylether	330	UJ	310	U	340	U	350	U	350	U	320	U	320	U	300	U	300	UJ	240	U
4-Nitroaniline	650	U	610	U	660	U	690	U	670	U	620	U	630	U	590	U	590	U	460	U
4,6-Dinitro-2-methylphenol	650	U	610	U	660	U	690	U	670	U	620	U	630	U	590	U	590	U	460	U
N-Nitrosodiphenylamine	330	U	310	U	340	U	350	U	350	U	320	U	320	U	300	U	300	U	240	U
1,2,4,5-Tetrachlorobenzene	330	U	310	U	340		350	U	350	U	320	U	320	U	300		300		240	
4-Bromophenyl-phenylether	330	UJ	310	U	340	U	350	U	350	UJ	320	U	320	UJ	300	U	300		240	
Hexachlorobenzene Atrazine	330 330	UJ	310 310	UJ U	340 340	UJ U	350 350	UJ U	350 350	UJ U	320 320	UJ	320 320	UJ U	300 300		300 300		240 240	
Pentachlorophenol	650	UJ	610	UJ	660	UJ	690	UJ	670	U	620		630		590		590		460	
Phenanthrene	450		530		560		520	00	920		1300	00	52000	J	2500		4300	00	45000	
Anthracene	180	J	210	J	230	J	210	J	400		650		27000	J	1100		1800		19000	
Carbazole	330	UJ	310	U	340	U	350	U	350	U	320	U	6600	J	300	U	220	J	2900	
Di-n-butylphthalate	330	UJ	310	UJ	340		350	UJ	350		320		320		300		300		240	
Fluoranthene	630	J	810	J	920	J	720	J	1400	J	2700	J	45000	J	4500		8200		41000	
Pyrene	510	J	660	J	640		640	J	1200		1900		39000		3100		5200		29000	
Butylbenzylphthalate	330	UJ	310	UJ	340	U	350	UJ	350	UJ	320	UJ	320	UJ	300		300		240	UJ
3,3'-Dichlorobenzidine Benzo(a)anthracene	330 350	U J	310 450	U J	340 480	U J	350 430	U J	350 710	J	320 1300	J	320 26000	J	300 1900		300 3300		240 24000	
Chrysene	430	J	490	J	550	-	520	J	810	J	1300		24000		2000		3200		19000	
Bis(2-ethylhexyl)phthalate	140	J	310	UJ	160	J	190	J	250	J	320	UJ	510	J	160		180		240	
Di-n-octylphthalate	330	UJ	310	UJ	340		350	UJ	350		320		320		300		300		240	
Benzo(b)fluoranthene	350	J	410	J	480		380	J	690	J	1300	J	35000	J	2100		3900		21000	
Benzo(k)fluoranthene	270	J	320	J	290	J	280	J	630	J	990	J	14000	J	1400		2700	J	20000	J
Benzo(a)pyrene	460	J	520	J	610		600	J	900	J	1600	J	28000	J	2400		4100	J	27000	
Indeno(1,2,3-cd)pyrene	260	J	320	J	360		330	J	520	J	1000		13000		1500		2600		13000	J
Dibenzo(a,h)anthracene	330	UJ	140	J	170	J	170	J	230	J	340	J	4400		470		850		3400	L
Benzo(g,h,i)perylene	400	J	430	J	520		590	J	600	J	1200	J	11000	J	1800		2800	J	11000	J

#### TABLE 3 Acme Steel Coke Plant Expanded Site Inspection Sediment and Waste Analytical Results Semi-Volatile Organic Compounds (ug/Kg)

Leasting	VOIC		V047	S	emi-V	olatil		anic (		ound	, v	Kg)	V000		V000		¥20.4		VOOF	
Location Matrix	X316 Waste		X317 Waste		X318 Waste		X319 Waste		X320 Waste		X321 Waste		X322 Waste		X323 Waste		X324 Waste		X325 Waste	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Volatile Compound	Result	Flag	° °	Flag		Flag	Result	Flag	Result	Flag	Result	Flag	• •	Flag	Result	Flag	ů č	Flag	Result	
Benzaldehyde	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	-	2000	U	2000	U
Phenol	2500	U	2400	U	3000	U	3000	U	2400	U	1300		1800	U	920	J	2000	U	2000	U
Bis(2-chloroethyl)ether	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
2-Chlorophenol	2500	U	2400	U	3000	U	3000	U	2400	U	1000		1800	U	2200	U	2000	U	2000	U
2-Methylphenol	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
2,2'-Oxybis(1-chloropropane	2500	U	2400	U	3000	U	3000	U	2400	U	210		1800		2200		2000		2000	
Acetophenone	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	U
4-Methylphenol	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	
N-Nitroso-di-n-propylamine Hexachloroethane	2500 2500	UU	2400 2400	U U	3000 3000	U U	3000 3000	UU	2400 2400	U U	1100 210	U	1800 1800	U	2200 2200	U U	2000 2000	U U	2000 2000	UU
Nitrobenzene	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	U
Isophorone	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	-	2000	U	2000	U
2-Nitrophenol	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	U
2,4-Dimethylphenol	2500	U	2400	U	3000	U	3000	U	2400	U	210	UJ	1800	UJ	2200		2000	UJ	2000	UJ
Bis(2-chloroethoxy)methane	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	U
2,4-Dichlorophenol	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
Naphthalene	2700		6700		5800		3500		3100		350		76000	J	10000	J	1000	J	1200	J
4-Chloroaniline	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
Hexachlorobutadiene	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800		2200		2000	U	2000	U
Caprolactam	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	
4-Chloro-3-methylphenol	2500	U	2400	U	3000	U	3000	U	2400	U	1100		1800	U	2200		2000	U	2000	U
2-Methylnaphthalene	2500	U	1200	J	3000	UJ	3000	UJ	2400	U	110	J	14000		2200	U	2000	U	2000	U
Hexachlorocyclopentadiene	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
2,4,6-Trichlorophenol	2500	U U	2400	U U	3000	U U	3000	U U	2400	U U	210 210	U	1800	UU	2200		2000	U U	2000	U U
2,4,5-Trichlorophenol	2500	U	2400 2400	U	3000 3000	U	3000 3000	U	2400	-		U	1800	U	2200		2000	U	2000 2000	-
1,1'-Biphenyl 2-Chloronaphthalene	2500 2500	U	2400	U	3000	U	3000	U	2400 2400	U U	210 210	U U	2700 1800	U	2200 2200		2000 2000	U	2000	UU
2-Nitroaniline	4900	U	4700	U	5900	U	5900	U	4800	U	400		3600		4200		3800	U	3900	-
Dimethylphthalate	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
2,6-Dinitrotoluene	2500	U	2400	U	3000	U	3000	U	2400	U	210	-	1800	U	2200	-	2000	-	2000	-
Acenaphthylene	7300	-	3600	-	3000	U	5300	-	2400	U	130	J	31000	J	5000		2000	U	2000	U
3-Nitroaniline	4900	U	4700	U	5900	U	5900	U	4800	U	400	U	3600	U	4200		3800	U	3900	U
Acenaphthene	2500	U	3000		3000	U	5400		2400	U	1100		2800		1300	J	2000	U	1200	J
2,4-Dinitrophenol	4900	U	4700	U	5900	U	5900	U	4800	U	400	U	3600	U	4200	U	3800	U	3900	U
4-Nitrophenol	4900	U	4700	U	5900	U	5900	U	4800	U	900		3600	U	4200	U	3800	U	3900	U
Dibenzofuran	2500	U	3400	J	3000	UJ	3000	U	1100	J	210	U	23000		2200	J	2000	U	2000	U
2,4-Dinitrotoluene	2500	U	2400	U	3000	U	3000	U	2400	U	1000		1800	U	2200		2000	U	2000	U
Diethylphthalate	2500	U	2400	U	3000	U	3000	U	2400	U	210		1800	U	2200		2000		2000	
Fluorene	2500	U	4100		3000	U	2000	J	2400	U	210	U	32000	J	5000		2000	U	2000	U
4-Chlorophenyl-phenylether 4-Nitroaniline	2500 4900	U U	2400 4700	U U	3000 5900	U U	3000 5900	U U	2400 4800	U U	210 400	U U	1800 3600	U U	2200 4200		2000 3800	U U	2000 3900	UU
4,6-Dinitro-2-methylphenol	4900	UJ	4700	U	5900	UJ	5900	U	4800	U	400	U	3600	U	4200		3800	UJ	3900	U
N-Nitrosodiphenylamine	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	-	2000	U	2000	-
1,2,4,5-Tetrachlorobenzene		U	2400	U	3000	U	3000	U	2400		210		1800	U	2200		2000	-	2000	
4-Bromophenyl-phenylether	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200	U	2000	U	2000	U
Hexachlorobenzene	2500	UJ	2400	UJ	3000	UJ	3000	UJ	2400	UJ	210		1800		2200		2000		2000	
Atrazine	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800	U	2200		2000	U	2000	U
Pentachlorophenol	4900	UJ	4700	UJ	5900	UJ	5900	UJ	4800	UJ	800		3600	U	4200		3800		3900	
Phenanthrene	6100	J	32000		4100		24000		9000		360		#####	J	30000		1700	J	4600	_
Anthracene	3200		11000		1400	J	17000		1500		110		32000	J	12000		2000		1500	
Carbazole	1100	J	2800		3000	U	3000	U	1200	J	210		12000		2900		2000	U	2000	
Di-n-butylphthalate	2500	U	2400		3000	U	3000	U	2400	U	210	U	1800		2200		2000	U	2000	
Fluoranthene	20000		40000 26000	J	7600 5500		##### 78000	J	12000 7400		1300 2100			J	62000		4900 4800		11000	J
Pyrene Butylbenzylphthalate	13000 2500	U	26000	U	3000	U	3000	J U	7400 2400	U	2100		66000 1800		52000 2200		4800 2000	U	10000 2000	
3,3'-Dichlorobenzidine	2500	U	2400	U	3000	U	3000	U	2400	-	210		1800		2200		2000	-	2000	-
Benzo(a)anthracene	11000		15000		4700	5	55000	J	4400		950		33000		28000		3700		10000	
Chrysene	12000		13000		5200		51000	J	5100		1000		30000		28000		4100		11000	
Bis(2-ethylhexyl)phthalate	2500	U	2400	U	3000	U	3000	U	2400	U	210	U	1800		2200		2000	U	2000	
Di-n-octylphthalate	2500	U	2400	U	3000	U	3000	U	2400	U	210		1800		2200		2000		2000	
Benzo(b)fluoranthene	15000		12000		6700		50000	J	5100		1400	J	29000		31000		4300	J	15000	
Benzo(k)fluoranthene	11000		11000		5000		32000		3500		1100		25000	J	24000	J	3800		12000	J
Benzo(a)pyrene	14000		13000		6700		50000	J	4400		1300	J	30000		31000		4600		17000	
Indeno(1,2,3-cd)pyrene	12000		8800		6000		29000		3500		1100		17000		21000		3500		13000	J
Dibenzo(a,h)anthracene	4000		3300		2300	J	12000		1400	J	400	J	5400		7100		1400	J	5500	J
					0000		20000		2000		4000		10000		23000	J	3800		45000	J
Benzo(g,h,i)perylene	13000	•	9400		6800		30000		3800		1200		16000						15000	
	13000 2500 74	U	9400 2400 1200	U	6800 3000 760	U	30000 3000 7700	U	2400 3600	U	1200 210 11000		18000 1800 5000	U	2200 2200 4300		2000 74	_	2000 8700	U

#### TABLE 3 Acme Steel Coke Plant Expanded Site Inspection Sediment and Waste Analytical Results Semi-volatile Organic Compounds (ug/Kg)

				S	emi-v	olatil	e Orga	anic (	-	ound	s (ug/ł	≺g)
Location			X327		X328		X329		X330		X338	
Matrix			Waste		Waste		Waste		Waste		Waste	
Units	ug/Kg Result	Flag	ug/Kg Result	Flag	ug/Kg	Flag	ug/Kg Result	Flog	ug/Kg Result		ug/Kg Result	Flag
Volatile Compound Benzaldehyde	190	гау U	210	riay U	Result 190	гау U	200	гау U	1800	U	3200	U
Phenol	190	U	110	J	190	-	200	U	20000	U	3200	U
Bis(2-chloroethyl)ether	190	U	210	U	190	U	200	U	1800	υ	3200	U
2-Chlorophenol	190	U	210	U	190		200	U	1800	U	3200	U
2-Methylphenol	190	U	210	U	190	U	200	U	6500	-	3200	U
2,2'-Oxybis(1-chloropropane	190	U	210	U	190	U	200	U	1800	U	3200	U
Acetophenone	190	U	210	U	190	U	200	U	1800	U	3200	U
4-Methylphenol	190	U	120	J	190	U	200	U	24000		3200	U
N-Nitroso-di-n-propylamine	190	U	210	U	190	U	200	U	1800	U	3200	U
Hexachloroethane	190	U	210	U	190		200	U	1800		3200	U
Nitrobenzene	190	U	210	U	190	U	200	U	1800	U	3200	U
Isophorone	190	U	210	U	190		200	U	1800	U	3200	U
2-Nitrophenol	190 190	UUJ	210 210	UUJ	190 190	U UJ	200 200	UUJ	1800 6600	U J	3200 3200	UU
2,4-Dimethylphenol Bis(2-chloroethoxy)methane		U	210	U	190	U	200	U	1800	JU	3200	U
2,4-Dichlorophenol	190	U	210	U	190	-	200	U	1800		3200	U
Naphthalene	110	J	5200	J	5100	J	3900	J	1800	U	7300	
4-Chloroaniline	190	U	210	U	190		200	U	1800		3200	U
Hexachlorobutadiene	190	U	210	U	190	U	200	U	1800	U	3200	U
Caprolactam	190	U	210	U	190	U	200	U	1800	U	3200	U
4-Chloro-3-methylphenol	190	U	210	U	190	U	200	U	1800	U	3200	U
2-Methylnaphthalene	190	U	880		1400		820	J	#####		1400	J
Hexachlorocyclopentadiene	190	U	210	U	190	U	200	U	1800	U	3200	U
2,4,6-Trichlorophenol	190	U	210	U	190		200	U	1800		3200	U
2,4,5-Trichlorophenol	190	U	210	U	190	U	200	U	1800	U	3200	U
1,1'-Biphenyl	190	U U	220		400	U	200		#####	J U	3200	U U
2-Chloronaphthalene 2-Nitroaniline	190 370	U	210 410	UU	190 370	U	200 400	U	1800 3500	U	3200 6200	U
Dimethylphthalate	190	U	210	U	190	U	200	U	1800	U	3200	U
2,6-Dinitrotoluene	190	U	210	U	190	U	200	U	1800	U	3200	U
Acenaphthylene	150	J	1500	-	940	J	5000	J	######	J	1500	J
3-Nitroaniline	370	U	410	U	370	U	400	U	3500	U	6200	U
Acenaphthene	190	U	1300		1100	J	140	J	48000	J	3200	U
2,4-Dinitrophenol	370	U	410	U	370	U	400	U	3500	U	6200	U
4-Nitrophenol	370	U	410	U	370	U	400	U	3500	U	6200	U
Dibenzofuran	190	U	1200		1200		690	J	#####		1500	J
2,4-Dinitrotoluene	190	U	210	U	190		200	U	1800	U	3200	U
Diethylphthalate	190	U	210	U	190	U	200	U	1800	-	3200	U
Fluorene	190	U	1500		1100		330	J	#####	J	3200	U
4-Chlorophenyl-phenylether 4-Nitroaniline	190 370	UU	210 410	U U	190 370	U U	200 400	U U	1800 3500	U U	3200 6200	U U
4,6-Dinitro-2-methylphenol	370	U	410	U	370	U	400	U	3500	UJ	6200	UJ
N-Nitrosodiphenylamine	190	U	210	U	190	U	200	U	1800	U	3200	U
1,2,4,5-Tetrachlorobenzene		U	210	U	190		200		1800		3200	U
4-Bromophenyl-phenylether	190	U	210	U	190	U	200	U	1800		3200	U
Hexachlorobenzene	190	U	210	U	190		200	-	1800		3200	-
Atrazine	190	U	210	U	190		200	U	1800		3200	
Pentachlorophenol	370	U	410	U	370		400	U	3500		6200	UJ
Phenanthrene	630		8400	J	8300		6200	J	#####		5500	J
Anthracene	140	J	5700	J	3400	J	2100	J	#####		1800	J
Carbazole	190	U	1200		1400		450	J	#####		3200	U
Di-n-butylphthalate	190	U	210		190		200		1800		3200	U
Fluoranthene Pyrene	870		16000	J	11000 8700			J	###### ######		9600	
Pyrene Butylbenzylphthalate	960 190	U	14000 210	J U	8700 190		13000 200		##### 1800	J U	7200 3200	U
3,3'-Dichlorobenzidine	190	U	210	U	190		200		1800		3200	
Benzo(a)anthracene	700		10000	J	6900		10000		######		6000	
Chrysene	750		11000	-	7000		10000		######		6800	
Bis(2-ethylhexyl)phthalate	190	U	210	U	190		200		1800		3200	υ
Di-n-octylphthalate	190	U	210		190		200		1800		3200	
	900	J	13000	J	8000		12000	J	#####		8600	
Benzo(b)fluoranthene			7000	J	6800	J	9800	J	#####	J	6600	
Benzo(b)fluoranthene Benzo(k)fluoranthene	710		7800	0								
. ,	710 980		7800 13000	J	9200		10000	J	#####		8500	
Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene	980 820		13000 8700	J	9200 6300	J	8100		#####	J	7300	
Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene	980 820 300		13000 8700 3200	J J	9200 6300 3300	J	8100 2800	J	##### 88000	J	7300 2800	J
Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene	980 820	U	13000 8700	J J	9200 6300	1 1 1	8100	J	#####	J J J	7300	J

#### TABLE 4

Acme Steel Coke Plant

Expanded Site Inspection Sediment and Waste Analytical Results Pesticide and PCB Compounds (ug/Kg)

Location	X211		X210		X212		X213		X214		X215		X216		X217		X218		X219		X316		X317		X318	
Matrix	Sedim	ent	Sedim	nent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim	ent	Sedim		Sedim	ent	Sedim	nent	Waste		Waste		Waste	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Volatile Compound	Result	Flag	Result	-		-	Result	_		Flag	Result		Result	-		_				Ĭ			Result	J		J
Aroclor-1016	64	U	61	U	66	UJ		U	67	U	62		63		59		59			U	49		46	-	58	
Aroclor-1221	64	U	61	U	66	UJ		U	67	U	62	U	63	U	59	-	59		45	U	49	U	46	-	58	-
Aroclor-1232	64	U	61	U	66	UJ	69	U	67	U	62	U	63	U	59	-	59	-	45	U	49	-	46	U	58	-
Aroclor-1242	64	U	61	U	66	UJ	69	U	67	U	62	U	63	U	59	U	59	U	45	U	49	U	46	U	58	U
Aroclor-1248	84	J	120	J	35	J	69	U	67	U	60	J	63	U	59	U	59	U	45	U	49	U	46	U	58	U
Aroclor-1254	42	J	45	J	19	J	69	UJ	67	UJ	29	J	63	U	59	U	59	U	45	U	49	U	46	U	58	U
Aroclor-1260	26	J	29	J	66	UJ	69	U	67	U	18	J	63	U	59	U	59	U	21	J	49	U	46	U	71	
Aroclor-1262	64	U	61	U	66	UJ	69	U	67	U	62	U	63	U	59	U	59	U	45	U	49	U	46	U	58	U
Aroclor-1268	64	U	61	U	66	UJ	69	U	67	U	62	U	63	U	59	U	59	U	45	U	49	U	46	U	58	U
alpha-BHC	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
beta-BHC	3.3	U	3.1	U	3.4	UJ	3.5	UJ	3.5	UJ	3.2	UJ	3.2	UJ	3	UJ	3	UJ	2.3	UJ	2.5	UJ	2.4	UJ	3	UJ
delta-BHC	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
gamma-BHC (Lindane)	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
Heptachlor	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
Aldrin	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
Heptachlor epoxide	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
Endosulfan I	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
Dieldrin	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	-	4.5	U	4.9	U	4.6		5.8	
4,4'-DDE	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
Endrin	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
Endosulfan II	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
4,4'-DDD	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
Endosulfan sulfate	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
4,4'-DDT	3.6	J	4	J	1.6	J	6.9	UJ	6.7	UJ	6.2	UJ	6.3	UJ	5.9	UJ	5.9	UJ	4.5	UJ	4.9	UJ	4.6	UJ	7.1	J
Methoxychlor	33	U	31	U	34	UJ	35	U	35	U	32	U	32	U	30	U	30	U	23	U	25	U	24	U	30	U
Endrin ketone	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
Endrin aldehyde	6.4	U	6.1	U	6.6	UJ	6.9	U	6.7	U	6.2	U	6.3	U	5.9	U	5.9	U	4.5	U	4.9	U	4.6	U	5.8	U
alpha-Chlordane	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
gamma-Chlordane	3.3	U	3.1	U	3.4	UJ	3.5	U	3.5	U	3.2	U	3.2	U	3	U	3	U	2.3	U	2.5	U	2.4	U	3	U
Toxaphene	330	U	310	U	340	UJ	350	U	350	U	320	U	320	U	300	U	300	U	230	U	250	U	240	U	300	U

#### TABLE 4

Acme Steel Coke Plant

Expanded Site Inspection Sediment and Waste Analytical Results

Seument and	vvaste An	aiyucai r	<b>Vesuits</b>
Pesticide and	PCB Com	pounds (	(ug/Kg)

Location	X319		X320		X321		X322		X323	indo	(ug/rtg) X324	X325	X326	X327	X328		X329	X330	X338
	Waste		Waste		Waste		Waste		Waste		Waste	Waste	Waste	Waste	Waste		Waste	Waste	Waste
Units			ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg		ug/Kg	ug/Kg	ug/Kg
Volatile Compound	Result	Flag		Flag	0 0	Flag	Result	Flag	0	Flag	Result Flag	5				Flag	Result Flag		Result Flag
Aroclor-1016	59		48		120	_	36		42		38 U	38 U	37 U	41 U	37 l	-	40 U	35 U	62 U
Aroclor-1221	59	U	48	U	40	U	36	U	42	U	38 U	38 U	37 U	41 U	37 เ	U	40 U	35 U	62 U
Aroclor-1232	59	U	48	U	40	U	36	U	42	U	38 U	38 U	37 U	41 U	37 l	U	40 U	35 U	62 U
Aroclor-1242	59	U	48	U	40	U	36	U	42	U	38 U	38 U	37 U	41 U	37 L	U	40 U	35 U	62 U
Aroclor-1248	59	U	48	U	40	U	36	U	42	U	38 U	38 U	37 U	41 U	37 l	U	40 U	35 U	62 U
Aroclor-1254	59	UJ	48	UJ	40	U	36	U	42	U	38 U	38 U	37 U	41 U	37 L	U	40 U	35 U	62 UJ
Aroclor-1260	59	U	180		140	J	36	U	42	U	38 U	38 U	37 U	41 U	37 l	U	40 U	35 U	150 J
Aroclor-1262	59	U	48	U	40	U	36	U	42	U	38 U	38 U	37 U	41 U	37 l	U	40 U	35 U	62 U
Aroclor-1268	59	U	48	U	40	U	36	U	42	U	38 U	49 U	37 U	41 U	37 l	U	40 U	35 U	62 U
alpha-BHC	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
beta-BHC	3	UJ	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 UJ
delta-BHC	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
gamma-BHC (Lindane)	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
Heptachlor	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
Aldrin	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
Heptachlor epoxide	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
Endosulfan I	3	U	2.5	U	2	U	1.8	U	2.2	U	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
Dieldrin	5.9	U	4.8	U	3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	6.2 U
4,4'-DDE	5.9	U	4.8	U	3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	6.2 U
Endrin	5.9	U	4.8	U	3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	6.2 U
Endosulfan II	5.9	U	4.8	U	3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	6.2 U
4,4'-DDD	5.9	U	4.8	U	3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	6.2 U
Endosulfan sulfate	5.9	U	4.8	U	3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	6.2 U
4,4'-DDT	5.9	UJ	14		3.9	U	3.6	U	4.2	U	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	U	4 U	3.5 U	15 J
Methoxychlor	30	U	25	U	20	U	18	U	22	U	20 U	20 U	19 U	21 U	19 l	U	20 U	18 U	32 U
Endrin ketone	5.9	U	4.8	-	3.9		3.6	-	4.2		3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	-	4 U	3.5 U	6.2 U
Endrin aldehyde	5.9	U	4.8	-	3.9	-	3.6	-	4.2	-	3.8 U	3.8 U	3.7 U	4.1 U	3.7 l	-	4 U	3.5 U	6.2 U
alpha-Chlordane	3	U	2.5	U	2	U	1.8	U	2.2	-	2 U	2 U	1.9 U	2.1 U	1.9 l	U	2 U	1.8 U	3.2 U
gamma-Chlordane	3	U	2.5	U	2	-	1.8		2.2		2 U	2 U	1.9 U	2.1 U	1.9 l		2 U	1.8 U	3.2 U
Toxaphene	300	U	250	U	200	U	180	U	220	U	200 U	200 U	190 U	210 U	190 l	U	200 U	180 U	320 U

#### TABLE 5 Acme Steel Sediment and Waste Samples TCL Metals Analysis Results in mg/Kg

Sampling Location :	X208		X209		X210		X211		X212		X214	X215	X213	X216	X217	X218
Matrix :	Sedime	nt	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment								
Units :	mg/Kg		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg								
ANALYTE	Result	Flag	Result Flag													
ALUMINUM	10100	J	8550	J	8760	J	9110	J	9500	J	11100 J	11600 J	11500 J	6700 J	8600 J	6800 J
ANTIMONY	0.8	J	13	UJ	0.65	J	0.94	J	1.2	J	0.63 J	0.94 J	1.1 J	1.2 J	1.3 J	0.66 J
ARSENIC	15.6	J	11.2	J	18.2	J	17.3	J	19	J	18.8 J	20.7 J	20 J	13.4 J	17.5 J	14.4 J
BARIUM	62.1	J	78.1	J	63	J	65.4	J	67.3	J	68.8 J	120 J	88.2 J	68.4 J	112 J	90.7 J
BERYLLIUM	0.44	J-	0.25	J-	0.47	J-	0.48	J-	0.52	J-	0.65 J-	1 J-	0.68 J-	0.48 J-	0.72 J-	0.83 J-
CADMIUM	0.84	J	1.2	J	1.7	J	1.8	J	2.4	J	2.3 J	2.5 J	2.5 J	1.8 J	2.5 J	2.2 J
CALCIUM	65700	J	50500	J	49700	J	45800	J	46700	J	54400 J	70000 J	54800 J	40800 J	49400 J	36900 J
CHROMIUM	36.1	J	43.8	J	62.7	J	65.3	J	67.5	J	74.2 J	127 J	77.8 J	60.5 J	76.8 J	55.7 J
COBALT	12.4	J	8.7	J	12.2	J	12.2	J	13.5	J	13 J	14 J	14.2 J	9.5 J	10.8 J	12.5 J
COPPER	56.8	J	88	J	80.7	J	77.2	J	90.5	J	98.8 J	93.5 J	99.3 J	65.3 J	80 J	70.8 J
IRON	38300	J	29800	J	52100	J	57100	J	60900	J	52900 J	56300 J	56500 J	41500 J	50900 J	43000 J
LEAD	110	J	132	J	180	J	204	J	277	J	246 J	279 J	264 J	204 J	256 J	207 J
MAGNESIUM	31500	J	21600	J	21200	J	19900	J	20100	J	21500 J	24800 J	23800 J	17300 J	18400 J	15000 J
MANGANESE	1010	J	622	J	1550	J	1420	J	1450	J	1380 J	1830 J	1460 J	945 J	1240 J	862 J
MERCURY	0.13	J	0.37		0.15	J	0.19		0.27		0.28	0.26	0.26	0.52	0.45	0.39
NICKEL	34.3	J	30.6	J	49	J	49.9	J	53	J	47 J	75.1 J	56.1 J	37.8 J	44 J	38.2 J
POTASSIUM	2400	J	2080	J	1830	J	1970	J	1890	J	2460 J	2140 J	2370 J	1290 J	1740 J	1370 J
SELENIUM	1.8	J	2.1	J	1.2	J	0.93	J	0.97	J	1.1 J	2 J	1.1 J	1.3 J	1.4 J	1.4 J
SILVER	1.3	J	1.3	J	2.4		2.4		3.3		2.6	2.7	2.8	1.8	2.1	2.3
SODIUM	864	UJ	1080	UJ	799	UJ	871	UJ	933	UJ	998 UJ	858 UJ	960 UJ	843 UJ	880 UJ	821 UJ
THALLIUM	4.3	U	5.4	U	4	U	4.4	U	4.7	U	5 U	4.3 U	4.8 U	4.2 U	4.4 U	4.1 U
VANADIUM	32.7	J	28.5	J	39.4	J	40.2	J	43.6	J	44.8 J	43.9 J	45.1 J	34.6 J	38.9 J	36.5 J
ZINC	314	J	421	J	780	J	782	J	1020	J	840 J	961 J	964 J	820 J	875 J	654 J
CYANIDE	0.86	U	1.1	U	1.4		1.7		1.5		1.5	1.3	1.5	1.4	2.4	1.1

NOTES: 1 J Indicates concentration is estimated

<sup>2</sup> UJ The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

#### TABLE 5 continued Acme Steel Sediment and Waste Samples TCL Metals Analysis Results in mg/Kg

Sampling Location :	X219	X316	X317	X318	X319	X320	X321	X322	X323	X324	X325
	Sediment	Waste	Waste	Waste	Waste	Waste	Waste	Waste	Waste	Waste	Waste
Units :	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
ANALYTE	Result Flag		0 0	0 0	Result Flag	Result Flag	00	ilig/itg	iiig/itg	ilig/itg	iiig/itg
ALUMINUM	7490 J	7000 J	7310 J	3300 J	6580 J	1630 J	16600 J	5890 J	3470 J	7340 J	1960 J
ANTIMONY	1.2 J	0.51 J	0.73 J-	0.85 J-	1.5 J-	0.36 J-	0.78 J-	0.71 J-	0.92 J-	0.61 J-	0.45 J-
ARSENIC	9.1 J	0.51 J 7.9 J	5.8 J-	0.85 J- 6.5 J-	1.5 J- 17.1 J-	0.36 J- 3.8 J-	0.78 J- 6.6 J-	0.71 J- 8.4 J-	0.92 J- 10 J-	4.4 J-	0.45 J- 3.4 J-
BARIUM		7.9 J 87.9 J		6.5 J-	46.6 J-	3.8 J- 46.2 J-	6.6 J- 222 J-	8.4 J- 345 J-	70.5 J-	4.4 J- 119 J-	
BERYLLIUM	132 J 1.5	87.9 J	118 J- 1.6 J-	0.86 UJ	40.0 J- 1.1 J-	46.2 J- 0.65 UJ	222 J- 3.4 J-	345 J- 1.6 J-	70.5 J- 0.64 UJ	1.5 J-	44.2 J- 0.58 UJ
	0.53 J	1.1 J	0.44 J-	0.86 UJ 0.83 J-	2.9 J-	0.65 UJ 0.55 J-	3.4 J- 0.56 J-	1.6 J- 1.7 J-	0.64 UJ	0.23 J-	0.58 UJ 0.14 J-
	0.53 J 68800 J	1.1 J 33600 J	0.44 J- 37800 J	0.83 J- 15200 J	2.9 J- 17000 J	0.55 J- 7580 J	0.56 J- 71100 J	30300 J	0.28 J- 34600 J	0.23 J- 40500 J	0.14 J- 6640 J
CHROMIUM	261 J	35.5 J	27.1 J-	21.4 J-	20 J-	34.3 J-	21.8 J-	18.3 J-	5.5 J-	40500 J 16.2 J-	4.2 J-
COBALT	201 J 5.5 J	5.5 J	27.1 J- 2.3 J-	21.4 J- 1.9 J-	20 J- 6.9 J-	34.3 J- 1.8 J-	21.6 J- 3.2 J-	2.7 J-	5.5 J- 2.8 J-	2.9 J-	4.2 J- 1.7 J-
COPPER	5.5 J 27 J		2.3 J- 19.5 J-	30.7 J-	6.9 J- 40.5 J-	26.5 J-	3.2 J- 22.1 J-	2.7 J- 32.5 J-	2.8 J- 33.1 J-	2.9 J- 12.8 J-	1.7 J- 17.4 J-
IRON	27 J 87300 J	44.8 J 24300 J	19.5 J- 14900 J	30.7 J- 15200 J	40.5 J- 44500 J	26.5 J- 8170 J	24500 J	32.5 J- 18500 J	33.1 J- 16600 J	12.8 J- 11700 J	5420 J
LEAD	49.7 J			15200 J 116 J	44500 J 167 J						
MAGNESIUM	49.7 J 15500 J	100 J 12900 J	454 J 11200 J	5130 J	5070 J	53.7 J 2040 J	104 J 19500 J	198 J 7600 J	70.4 J 16300 J	26.4 J 7950 J	35.6 J 1930 J
MANGANESE					1200 J	2040 J 267 J	2830 J				
MERCURY	6630 J	929 J	461 J 113	360 J 84.6				491 J	406 J	1020 J	140 J
NICKEL	1.6	15.8	6.2 J-	84.6 7.3 J-	5.7 27.7 J-	2.8	2.9	5.1	6 7 J-	0.37 9 J-	1.9
POTASSIUM	22.3 J 527 J	25 J 789 J		7.3 J- 856 UJ		8 J-	7.9 J- 1310 J-	10.5 J-		9 J- 726 J-	4.4 J-
			654 UJ		938 UJ	654 UJ		590 UJ	641 UJ		581 UJ
SELENIUM	2.2 J	1.1 J	2.8 J-	4.8 J-	4.2 J-	1.9 J-	5.9 J-	3.6 J-	4.1 J-	3.1 J-	0.95 J-
SILVER	0.92 J	1.3 J	0.21 J-	1.7 UJ	0.78 J-	1.3 UJ	12.3 UJ	1.2 UJ	1.3 UJ	1.1 UJ	1.2 UJ
SODIUM	592 UJ	742 UJ	541 J	347 J	334 J	206 J	956 J	453 J	286 J	436 J	156 J
THALLIUM	3 U	3.7 U	3.3 UJ	4.3 UJ	1 J-	3.3 UJ	3.1 UJ	0.19 J-	3.2 UJ	2.8 UJ	2.9 UJ
VANADIUM	88.8 J	20.3 J	16 J-	18.9 J-	20 J-	14.9 J-	33.4 J-	12.1 J-	10.5 J-	12 J-	5 J-
	152 J	701 J	120 J-	390 J-	737 J-	108 J-	95.2 J-	231 J-	93.8 J-	40.8 J-	33.7 J-
CYANIDE	6.4	6.4	231	172	2.8	14.9	3.2	4.9	2.1	3.3	14

NOTES: 1 J Indicates concentration is estimated

<sup>2</sup> UJ The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

#### TABLE 5 continued Acme Steel Sediment and Waste Samples TCL Metals Analysis Results in mg/Kg

Sampling										
Location :	X326	X327		X328		X329		X330		
Matrix :	Sedime	nt	Waste		Waste		Waste		Waste	
Units :	mg/Kg									
ANALYTE	Result	Flag								
ALUMINUM	760	J	10400	J	612	J	4090	J	4460	J
ANTIMONY	0.31	J-	1	J-	6.6	R	2.6	J-	0.34	J-
ARSENIC	3.1	J-	10.8	J-	2.5	J-	18.4	J-	8.8	J-
BARIUM	19.2	J-	119	J-	21.2	J-	97.4	J-	128	J-
BERYLLIUM	0.58	UJ	1.7	J-	0.55	UJ	1	J-	0.57	UJ
CADMIUM	0.089	J-	0.68	J-	0.055	J-	0.5	J-	0.16	J-
CALCIUM	2640	J	51500	J	4210	J	13300	J	9860	J
CHROMIUM	3.4	J-	11.7	J-	2.9	J-	8.4	J-	6.4	J-
COBALT	0.86	J-	4.8	J-	2.1	J-	5.3	J-	4.1	J-
COPPER	5.8	J-	47.8	J-	6.4	J-	33.1	J-	23.2	J-
IRON	4800	J	20500	J	2060	J	12800	J	11500	J
LEAD	18	J	144	J	4.6	J	62.4	J	11.9	J
MAGNESIUM	578	UJ	5670	J	2000	J	5270	J	2580	J
MANGANESE	101	J	339	J	51.3	J	297	J	171	J
MERCURY	0.98		0.93		0.18	J-	52.2		0.25	J-
NICKEL	3.4	J-	12.8	J-	6.5	J-	13.2	J-	8.8	J-
POTASSIUM	578	UJ	1450	J-	552	UJ	604	UJ	902	J-
SELENIUM	0.96	J-	3.6	J-	0.7	J-	1.3	J-	1.3	J-
SILVER	1.2	UJ	5.1	UJ	1.1	UJ	1.2	UJ	1.1	UJ
SODIUM	152	J	639	J	126	J	298	J	339	J
THALLIUM	2.9	UJ	0.34	J-	2.8	UJ	0.37	J-	2.9	UJ
VANADIUM	3.8	J-	23.9	J-	10.3	J-	13.4	J-	12.4	J-
ZINC	24.6	J-	164	J-	21.9	J-	112	J-	20.6	J-
CYANIDE	0.96		0.94		1.7		3.5		1.2	

NOTES: 1 J Indicates concentration is estimated

 $^{2}$   $\,$  UJ  $\,$  The analyte was analyzed for, but not detected. The reported qu

## Table 6Sample Information

Sample	Туре	Sample / Location Description	Analysis *
X221	Sediment	Collected from Indian Ridge Marsh approximately 1,400 feet south of the culvert draining the southwest corner of the Coke Plant. Sampling location approximately 35 feet east of railroad tracks. Water at location is approximately 18 – 24" deep. Sample X221 collected from <b>12 – 18</b> " <b>beneath sediment surface</b> . Sampled <b>soft black silt with gray hue</b> , resting on top of stiff layer assumed to be more clayey. No chemical odor noted. Sampled with stainless steel auger and trowel.	TM, VOC, SVOC, PEST/PCB
X222	Sediment	Collected from Indian Ridge Marsh approximately 630 feet south of the culvert draining the southwest corner of the Coke Plant. Sampling location approximately 40 feet east of railroad tracks. Water at location is approximately 18" deep. Sample X222 collected from <b>6 - 12" beneath</b> <b>sediment surface</b> . Sampled soft to <b>medium black silt</b> <b>with low percentage sand</b> , resting on top of stiff layer assumed to be more clayey. No chemical odor noted. Sampled with stainless steel auger and trowel.	TM, VOC, SVOC, PEST/PCB
X223	Sediment	Sediment sample X223 was collected from ditch approximately 8 feet south of the culvert draining the southwest corner of the Coke Plant. Culvert runs north and south beneath western terminus of 116 <sup>th</sup> Street. Sampling location approximately 40 feet east of railroad tracks. Approximately 6"of water ponded at location. Sample X223 collected from <b>6 - 12" beneath sediment</b> <b>surface</b> . Sample consisted of soft to <b>medium black silt</b> <b>with low percentage sand</b> . Sample had strong natural organic smell. Sampled with stainless steel auger and trowel. Vegetation in area was sparse but some roots noted in sediment.	TM, VOC, SVOC, PEST/PCB
X224	Sediment	Sediment sample X224 intended to represent sediments prior to where surface water drains into north side of the culvert draining the southwest corner of the Coke Plant. Culvert runs north and south beneath western terminus of 116 <sup>th</sup> Street. Recently it appears that a truckload of railroad ballast had been dumped in the area covering the north opening of the culvert. Sampling location approximately 20 feet north of approximate location of culvert opening. Rudimentary erosion control consisting of telephone poles and used tires had been constructed decades earlier in apparent attempt to keep waste material from eroding off the site. Sample X224 collected on the east side wall of the ditch from <b>5 - 10" beneath sediment surface</b> . Sampled contained <b>black loam with slag fines</b> . Sampled with stainless steel trowel.	TM, VOC, SVOC, PEST/PCB
X225	Sediment	Sediment sample X225 collected from the eastern opening of culvert running westward beneath the railroad tracks and into surface water feeding Big Marsh. Sample collected from <b>4" beneath the sediment surface</b> of sediments accumulated inside the opening of the culvert. Material sampled was <b>black loam with roots</b> . Sample collected with stainless steel trowel.	TM, VOC, SVOC, PEST/PCB

Sample	Туре	Sample / Location Description	Analysis *
X226	Sediment	Sediment sample X226 collected from a low-lying area adjacent to the ditch running north and south along the western border of the Coke Plant property. The ditch is much less defined in this area and becomes more of a depression. Sample collected approximately 6 feet west of the fence surrounding the facility. Sample collected from <b>12</b> " <b>below ground surface</b> with a stainless-steel trowel. Material sampled was <b>black/dark brown silty</b> <b>loam with small amount of roots</b> .	TM, VOC, SVOC, PEST/PCB
X227	Sediment	Sample X227 collected at the northwestern corner of the Coke Plant within the surface water drainage route flowing southward along the property's western edge. Location intended to represent conditions within the drainage route prior to impacts from the facility. Sample collected from low-lying area west of the facility fence and approximately 60 feet east of the railroad tracks. Sample collected from <b>3 - 8" below ground surface</b> with a stainless-steel trowel. Material sampled was <b>black/dark brown loam</b> <b>with low percentage sand</b> . Roots present in material sampled. No slag or site impacts noted. Wetland species noted in immediate vicinity.	TM, VOC, SVOC, PEST/PCB
X228	Sediment	Sample X228 collected from low-lying area north of the Coke Plant's northern boundary within the surface water drainage route flowing southward along the property's western edge. Location intended to represent background conditions. Sample collected from low-lying area on the western edge of the wetland located here that appears to drain southward. Sample collected from <b>3" below</b> <b>ground surface</b> with a stainless-steel trowel. Material sampled was <b>black/dark brown loam with low</b> <b>percentage sand</b> . Roots present in material sampled. No slag or site impacts noted. Phragmites/wetland species to east noted in immediate vicinity. Railroad ballast, trees and some slag located to the west of sampling location.	TM, VOC, SVOC, PEST/PCB
X230	Sediment	Duplicate of X224	TM, VOC, SVOC, PEST/PCB
X331	Waste	Waste sample X331 collected in west-central portion of site at the beginning of drainageway that once flowed south and then off-site into Indian Ridge Marsh. Sample area is covered by phragmites growing out of slag fines and cinders with some loam. Sample collected at the base of a concrete wall defining the western edge of the drainageway from $0 - 3$ " BGS. Material sampled was cinders and possibly slag fines mixed with low percentage of dark brown/black loam. Collected with stainless steel trowel.	TM, VOC, SVOC, PEST/PCB
X332	Waste	Waste sample location X332 collected in south-central portion of site where high concentrations of SVOCs identified in previous sampling events. Surface of site in the area covered with tar spots, slag pieces and associated fines. Sample X332 obtained with stainless steel trowel from 2 - 4" in black slag fines and small slag pieces.	TM, VOC, SVOC, PEST/PCB
X333	Waste	Collected approximately 15' south of historic tank location in eastern portion of facility. Sample X333 obtained with stainless steel trowel from <b>0 - 6" in cinders and slag</b> <b>fines</b> .	TM, VOC, SVOC, PEST/PCB

TM - Total Metals VOC - Volatile Organic Compounds SVOC – Semi-volatile Organic Compounds PEST/PCB – Pesticides and Polychlorinated Biphenyl Compounds

\*

#### TABLE 7 Acme Steel Coke Plant Site Reassessment Sediment and Waste Analytical Results Volatile Organic Compounds (ug/Kg)

Lessting	X221		X222		X223		X224		X225		X226		X227		X228		X230		X331		X332		X333	
Location Matrix	Sedim	ont	∧∠∠o Sedim	ont	A230 Sedim	ont	Waste		A332 Waste		∧333 Waste													
Units	ug/Kg	lent	ug/Kg	ent	ug/Kg	ent	ug/Kg		ug/Kg		ug/Kg		ug/Kg											
Volatile Compound	Result	Flag	Result	Flag	Result		Result		ů ů	Flag	Result													
1,1,1-Trichloroethane		UJ		U	19	Ŭ		UJ		U	9.8	0	9.9	Ŭ	6.4	U		UJ	7.4	UJ	7.2	J	2.5	Ŭ
1,1,2,2-Tetrachloroethane		UJ	14	U		UJ	9.3	UJ	16	U	9.8	UJ	9.9		6.4	U	8.7	UJ	7.4	UJ	7.2			IJ
1,1,2-Trichloro-1,2,2-Trifluoro		UJ		U	19			U		U	9.8		9.9		6.4	U	-	U	7.4	UJ		UJ	7.1	
1,1,2-Trichloroethane		UJ		U	19			UJ	16	U		UJ	9.9		6.4	U		UJ	7.4	UJ	7.2			UJ
1,1-Dichloroethane		UJ		U	19		9.3		16	-	9.8		9.9	-	6.4	U	-	U	7.4	U	7.2		7.1	
1,1-Dichloroethene		UJ		U	19			U		U	9.8		9.9		6.4	U		U	7.4	U		U	7.1	
1,2.3-Trichlorobenzene		UJ		UJ	19			R	16	UJ	9.8	R	9.9	-	6.4	UJ		R	7.4	R		R		R
1,2,4-Trichlorobenzene		UJ		UJ	19		9.3		16		9.8		9.9		6.4	UJ	8.7		7.4		7.2		7.1	
1,2-Dibromo-3-chloropropan		UJ		UJ	19			R	16	UJ		R	9.9		6.4	UJ		R	7.4	R	7.2		7.1	
1,2-Dibromoethane		UJ		U	19		9.3			U	9.8		9.9		6.4	U	8.7		7.4		7.2		7.1	
1,2-Dichlorobenzene		UJ		UJ	19			R		UJ		R	9.9	-	6.4	UJ		R	7.4	R		R	7.1	
1,2-Dichloroethane	30	UJ	14	U		UJ		U	16	11	9.8	UJ	9.9		6.4		8.7		7.4	UJ	7.2			UJ
1,2-Dichloropropane		UJ		U	19			UJ		U	9.8		9.9	-	6.4	U	-	UJ	7.4	UJ		UJ	7.1	
1,3-Dichlorobenzene		UJ		UJ	19			R	16	UJ	9.8	R	9.9		6.4	UJ	-	R	7.4	R	7.2			R
1,4-Dichlorobenzene		UJ		UJ	19		9.3		16		9.8		9.9		6.4	UJ	8.7		7.4		7.2		7.1	
2-Butanone	43	J	25	.1	33			U		U	20		20		13				15		14		14	
2-Hexanone		UJ		U		UJ		UJ	42	•	20	-	20		13	U			15	UJ	14	UJ	14	
4-Methyl-2-pentanone		UJ		U		UJ		UJ		U	-	UJ	20	-	13	-		UJ	15			UJ	14	
Acetone	120	J	55		82	J	19	U	26	J	19	J	20	U	13	U	17	U	15		5.5	J	14	
Benzene	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	11	J+	4.1	J+
Bromochloromethane	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U
Bromodichloromethane	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Bromoform	30	UJ	14	UJ	19	UJ	9.3	R	16	UJ	9.8	R	9.9	UJ	6.4	UJ	8.7	R	7.4	R	7.2	R	7.1	R
Bromomethane	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U
Carbon disulfide	36	J	17		19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	3.7	J	7.4	U	7.2	U	7.1	U
Carbon tetrachloride	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Chlorobenzene	30	UJ	14	U	19	UJ	9.3	UJ	16	UJ	9.8	UJ	9.9	UJ	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Chloroethane	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U
Chloroform	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U
Chloromethane	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U
cis-1,2-Dichloroethene	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	UJ	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	UJ
cis-1,3-Dichloropropene		UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Cyclohexane	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Dibromochloromethane	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Dichlorodifluoromethane	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U
Ethylbenzene	30	UJ	14	U	-	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Isopropylbenzene	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
m, p-Xylene	30	UJ	14	U	19	UJ	9.3	UJ	16	U	9.8	UJ	9.9	U	6.4	U	8.7	UJ	7.4	UJ	7.2	UJ	7.1	UJ
Methyl acetate	30	UJ	14	U	19		9.3	U	16	U	9.8		9.9	U	6.4	U	8.7	U	7.4	UJ	7.2	UJ	7.1	UJ
Methyl tert-butyl ether		UJ	14	U	19	UJ	9.3	U	16	U	9.8	UJ	9.9	U	6.4	U	8.7	U	7.4	UJ	7.2	UJ	7.1	UJ
Methylcyclohexane		UJ		U	19			UJ	16	U	5.4	J+	9.9	-	6.4	U	8.7	UJ	7.4	UJ	6.5	J+	3.3	
Methylene chloride		UJ	14	U		UJ	9.3	U	16	U	9.8	UJ	9.9	U	6.4		8.7		7.4	UJ	7.2		7.1	
o-Xylene	30	UJ	14			UJ	9.3	UJ	16		9.8		9.9	U	6.4	U	8.7	UJ		UJ	7.2	_	7.1	
Styrene		UJ	14			UJ	9.3		16		9.8		9.9		6.4		8.7		7.4		7.2		7.1	
Tetrachloroethene		UJ	14		19		9.3		16		9.8		9.9		6.4		8.7			UJ	7.2		7.1	
Toluene		UJ	14			UJ	9.3		16		9.8		9.9		6.4		8.7			UJ	6.6			J+
trans-1,2-Dichloroethene		UJ	14			UJ	9.3		16		9.8		9.9		6.4		8.7		7.4		7.2		7.1	
trans-1,3-Dichloropropene		UJ	14			UJ	9.3		16		9.8		9.9		6.4		8.7			UJ	7.2		7.1	
Trichloroethene		UJ	14		19		9.3		16		9.8		9.9		6.4		8.7			UJ	7.2		7.1	
Trichlorofluoromethane		UJ	14			UJ	9.3		16		9.8		9.9		6.4		8.7			UJ	7.2		7.1	
Vinyl chloride	30	UJ	14	U	19	UJ	9.3	U	16	U	9.8	U	9.9	U	6.4	U	8.7	U	7.4	U	7.2	U	7.1	U

NOTES: 1 J Indicates concentration is estimated

2 U The analyte was analyzed for, but not detected.

3 UJ The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

#### TABLE 8 Acme Steel Coke Plant Sediment and Waste Analytical Results Semi-volatile Organic Compounds (ug/Kg)

Location	X221		X222		X223		X224		X225	X226	X227	X228	X230	X331	X332	X333	
Matrix	Sedimer	nt	Sedime	ent	Sedime	ent	Sedime	ent	Sediment	Sediment	Sediment	Sediment	Sediment	Waste	Waste	Waste	
Units	ug/Kg		uq/Kq		uq/Kq		ug/Kg		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result Flag	Result Flac	0 0	0 0	0 0	Result Flag	Result Flag	0 0	Flag
1,1'-Biphenyl	660	U	440	U	260	J	1300	U	1600 U	160 J	1200 U	220 U	590 J	4700 J	700 J	170	Ŭ
1,2,4,5-Tetrachlorobenzene	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	-	-
1.4-Dioxane	260	UJ	170	UJ	780		500	U	640 U	460 U	470 U	86 UJ	490 U	6500 U	1600 U	400	U
2,2'-Oxybis(1-chloropropane	1300	U	860	U	3800	U	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	U
2,3,4,6-Tetrachlorophenol	660	U	440	U	2000		1300	υ	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2,4,5-Trichlorophenol	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2,4,6-Trichlorophenol	660	U	440	υ	2000	U	1300	υ	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2,4-Dichlorophenol	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2,4-Dimethylphenol	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2,4-Dinitrophenol	1300	U	860	U	3800	U	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	U
2,4-Dinitrotoluene	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2,6-Dinitrotoluene	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2-Chloronaphthalene	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2-Chlorophenol	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2-Methylnaphthalene	660	U	160	J	940	J	520	J	490 J	1000 J	720 J	220 U	2400	14000 J	2700 J	840	J
2-Methylphenol	1300	U	860	U	3800	U	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	U
2-Nitroaniline	660	U	440	U	2000	U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	U
2-Nitrophenol	660	U	440				1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	
3,3'-Dichlorobenzidine	1300	U	860		3800		2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	
3-Methylphenol + 4-Methylph	1300	U	860	-	3800	-	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	-
3-Nitroaniline	1300	U		U	3800		2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	
4,6-Dinitro-2-methylphenol	1300	-		U	3800	-	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	-
4-Bromophenyl-phenylether	660	U	440		2000		1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	
4-Chloro-3-methylphenol	660		440	-	2000		1300	-	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	-
4-Chloroaniline	1300	U		U	630		2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	
4-Chlorophenyl-phenyl ether	660	U	440	-	2000	-	1300	-	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000	-
4-Nitroaniline	1300	U	860		3800		2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	
4-Nitrophenol	1300	0	860	0	3800	U	2400	-	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	0
Acenaphthene	120	J	89	J	300	J	1300	U	250 J	290 J	280 J	220 U	550 J	4500 J	2700 J	520	J
Acenaphthylene	170	J	97	J	1300	-	470	-	1200 J	720 J	230 J	220 U	1100 J	1E+05	9800	1100	
Acetophenone	350	J	000	U	3800	U	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	U
Anthracene	240	J	170	J 	1800	J 	590	J	1400 J	900 J	970 J	220 U	2000	1E+05	13000	3300	
Atrazine	1300	U	000	U 	3800	-	2400	U 	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	_
Benzaldehyde	1300	U	860	U		U	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000	U
Benzo(a)anthracene	740 820		490 620		5400		2900		5900	4000	2700 2700	36 J	6800	6E+05	61000	9500	
Benzo(a)pyrene					6100		3100		7800	5900		56 J	7900	6E+05	96000	7900	
Benzo(b)fluoranthene	1300		900		9300		4800		14000	8700	3700	83 J	9800	8E+05	1E+05	11000	
Benzo(g,h,i)perylene	660 460	U	530 310		4100 3400		2400 1900		5700 18000	4200 2800	1900 1200	220 U	4900 3400	4E+05 2E+05	53000 36000	3600 4100	
Benzo(k)fluoranthene		J U	310 440	-	2000		1900	U	18000 1600 U	2800 1200 U	1200 1200 U	27 J 220 U	3400 1200 U	2E+05 16000 U	36000 4100 U	4100	
bis(2-Chloroethoxy)methane		U U						U U									
Bis(2-Chloroethyl) ether	1300	-	860	U I	3800	-	2400	-	3200 U	2300 U	2000 0	420 U	2400 U		8000 U	2000	-
bis(2-Ethylhexyl)phthalate	170	J U	79	J	630		1300 1300	U U	1600 U	130 J	140 J 1200 U	220 U 220 U	440 J 1200 U	2200 J 16000 U	460 J 4100 U	1000	
Butylbenzylphthalate	660	U	440 860		2000 3800		2400	-	1600 U 3200 UJ	1200 U 2300 UJ	1200 U 2300 UJ	420 UJ	2400 UJ	16000 U 32000 UJ	8000 UJ	1000 2000	
Caprolactam	1300	UJ U										420 UJ 420 U					
Carbazole	1300	U	860	U	540	J	330	J	590 J	420 J	410 J	420 0	720 J	32000	4300 J	1700	J

#### TABLE 8 Acme Steel Coke Plant Sediment and Waste Analytical Results Semi-volatile Organic Compounds (ug/Kg)

Location Matrix	X221 Sediment		X222 Sediment	X223 Sedir		X224 Sedime		X225 Sediment	X226 Sediment	X227 Sediment	X228 Sediment	X230	X331 Waste	X332 Waste	X333 Waste
	ug/Kg		ug/Kg	ug/Kg		ug/Kg	ent	ug/Kg	ug/Kg	ug/Kg	ug/Kg	Sediment ug/Kg	ug/Kg	ug/Kg	ug/Kg
		lag	Result Flag	_		Result	Flag	5		Result Flag					Result Flag
Chrysene	970		640	660	D	3400		9100	5500	3300	59 J	7300	6E+05	61000	9800
Dibenzo(a,h)anthracene	660 U		440 U	200	υ	1300	U	2000	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Dibenzofuran	120 J		130 J	79	D J	270	J	430 J	480 J	410 J	220 U	1400	27000	3200 J	1300
Diethylphthalate	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Dimethylphthalate	660 U		440 U	200	υu	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Di-n-butylphthalate	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Di-n-octylphthalate	1300 U		860 U	380	υ	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000 U
Fluoranthene	1600		970	860	D	3800		9500	5000	4800	82 J	11000	1E+06	1E+05	15000
Fluorene	220 J		150 J	59	D J	1300	U	190 J	260 J	340 J	220 U	610 J	24000	3000 J	920 J
Hexachlorobenzene	660 U		440 U	200	D U	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Hexachlorobutadiene	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Hexachlorocyclo-pentadiene	1300 U	J	860 UJ	380	υ	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000 U
Hexachloroethane	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Indeno(1,2,3-cd)pyrene	590 J		510	440	D	2500		6400	4400	1900	41 J	5000	4E+05	55000	4500
Isophorone	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
Naphthalene	120 J		210 J	190	D J	460	J	700 J	1000 J	530 J	220 U	4700	79000	12000	1200
Nitrobenzene	660 U		440 U	200	υu	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
N-Nitroso-di-n propylamine	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	1200 U	16000 U	4100 U	1000 U
N-Nitrosodiphenylamine	660 U		440 U	200	υ	1300	U	1600 U	1200 U	1200 U	220 U	340 J	16000 U	4100 U	1000 U
Pentachlorophenol	1300 U		860 U	380	υ	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000 U
Phenanthrene	630 J		490	430	D	2600		1700	2700	4500	220 U	7700	4E+05	40000	13000
Phenol	1300 U		860 U	380	υ	2400	U	3200 U	2300 U	2300 U	420 U	2400 U	32000 U	8000 U	2000 U
Pyrene	1200		760	770	C	3600		11000 J	5000	4300	74 J	8700	9E+05	95000	16000

NOTES: 1 J Indicates concentration is estimated

2 U The analyte was analyzed for, but not detected.

3 UJ The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

#### TABLE 9 Acme Steel Coke Plant Site Reassessment Sediment and Waste Analytical Results Pesticide/PCB Compounds (ug/Kg)

Location	X221		X222		X223		X224		X225		X226	X227	X228	X230	х	(331		X332		X333	Π
Matrix	Sedim	ent	Sedim	nent	Sedim	ent	Sedim	ent	Sedim	ent	Sediment	Sediment	Sediment	Sedimer	nt V	Vaste		Waste		Waste	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ι	ug/Kg		ug/Kg		ug/Kg	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag		Flag		Flag	Result Flag	Result Flag	Result Flag	Result Fl			Flag	Result	Flag	Result	Flag
Aroclor-1016	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
Aroclor-1221	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
Aroclor-1232	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
Aroclor-1242	44	J	20	J	49	J	9.1	J	62	U	12 J	9.8 J	42 U	8.9 J		40	U	27	J	37 .	J-
Aroclor-1248	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
Aroclor-1254	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
Aroclor-1260	130	UJ	85	U	49	J	29	J	15	J	31 J	18 J	42 U	27 J		40	U	29	J	23 .	J-
Aroclor-1262	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
Aroclor-1268	130	UJ	85	U	78	U	49	U	62	U	45 U	46 U	42 U	47 U		40	U	39	U	40 l	UJ
4,4'-DDD	50	J	260		38		3.2	J	1.5	J+	0.71 J	4.7	4.2 U	4.3 J		0.96	J+	3.9	R	2.6	J
4,4'-DDE	34	J	80		25	J	43		10	J+	8.7 J	230	0.52 J	41		0.58	J+	3.9	R	4.2	J
4,4'-DDT	11	J	24		30	J	72		21	J+	25	210	4.2 U	56		8.3	J+	3.9	R	20 l	U
Aldrin	5.5	J	0.96	J	3.3	J	0.86	J	3.2	U	2.3 U	2.4 U	2.1 U	0.28 J		0.35	J+	0.52	J-	1.8	J
alpha-BHC	1.1	J	4.4	U	4.1	U	2.5	U	3.2	U	2.3 U	2.4 U	2.1 U	2.4 U		0.26	J+	0.48	J-	10 l	U
beta-BHC	8.7	J	4.4	U	17	J	2.5	U	3.2	U	2.3 U	2.4 U	2.1 U	2.4 U		2.1	U	2	R	10 l	U
cis-Chlordane	6.6	UJ	4.4	U	5.2	J	0.9	J	3.2	U	1.8 J	2.4 U	0.59 J	2 J		3.6	J+	2.8	J-	1.6	J
delta-BHC	3.4	J	0.61	J	1.7	J	0.38	J	3.2	U	0.47 J	0.32 J	0.84 J	0.41 J		1.9	J+	2	R	1.4	J
Dieldrin	5.5	-	4.8	J	13	J	7.6	-	7.1		9.8 J	6.3 J	1.3 J	7.9 J		1.1		0.48	-	1.7	-
Endosulfan I	1.9	-	4.4	-	2	J	0.51	-	3.2	-	0.67 J	0.37 J	0.54 J	1.3 J	_	1.2		-	J-	8.1 、	-
Endosulfan II	13		8.5	-	-	U	4.9	U	14	J+	4.5 U	4.6 U	4.2 U	2.7 J		4	U	12	-	42 、	
Endosulfan sulfate	13	UJ	8.5	-	7.8	U	1.9	-	2.7	J+	3.4 J	5.5 J	4.2 U	1.8 J	_		J+	0.68	-	2.3	J
Endrin	0.9	J	8.5	U	2.6	J	0.52	J	2.3	J+	1 J	1.3 J	4.2 U	0.92 J		0.5		1.5	J-	8.1	J
Endrin aldehyde	13		1.3	J	7.6	J	1	J	2.9	J+	1.5 J	8.1	4.2 U	9.7	_		J+	1.1	J-	4.2	J
Endrin ketone	13	UJ	2.5	J	2.8	J	0.76	J	43	J+	2.4 J	0.85 J	4.2 U	5.4 J		16	J+	100		280	-
gamma-BHC (Lindane)	3.1	J	4.4	U	4	U	8.6		7.9	J+	15 J	6 J	2.1 U	8.3 J	_		J+	_	R	10 l	-
Heptachlor	5.5	-	4.4	U	6.3	J	1.8	-	3.2	U	1.5 J	1.3 J	2.1 U	1.8 J		4.4	-	2.5		8.9	-
Heptachlor epoxide	7.1	-	4.4	U	2.8	J	0.86	J	0.69	J+	1.5 J	0.39 J	2.1 U	0.83 J		2.1	-	0.95	J-	4.8	J
Methoxychlor	66		44	-	120		110		150	-	170	65	2.6 J	130		130	J+	440		2800	
Toxaphene	660		440	-	400	-	250	-	320	-	230 U	240 U	210 U	240 U		210	-	200		1000 l	-
trans-Chlordane	28	J	24	J	6.2	J	0.49	J	3.2	U	0.5 J	2.4 U	0.67 J	0.41 J		16	J+	2	R	1.4	J

NOTES: 1 J Indicates concentration is estimated

2 U The analyte was analyzed for, but not detected.

3 UJ The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

#### TABLE 10 Acme Steel Site Reassessment Sediment and Waste Samples TCL Metals Analysis Results in mg/Kg

Sampling	Vood		Vooo		Vooo		Vool		VOOF		Vooo		V007		Vooo		Vooo		Vood		Vooo		Vooo	
Location :	X221		X222		X223		X224		X225		X226		X227		X228		X230		X331		X332		X333	
Matrix :	Sedimer	nt	Sedime	nt	Sedime	nt	Sedime	nt	Sedimer	nt	Sedimer	nt	Sedimer	nt	Sedime	nt	Sedime	nt	Waste		Waste		Waste	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
ANALYTE		Flag		Flag	Result	J	Result	Flag	Result	Flag		Flag	Result	Flag		Flag		-		Flag		Flag		Flag
ALUMINUM	11500		6480		8750		7030		3150		2320		4060		3980		6470		4220		3200		3660	
ANTIMONY	12	UJ	17.3	UJ	10.8	UJ	9.2	UJ	11.1	UJ	7.4	UJ	7.4	UJ	6.8	UJ	8.1	UJ	5.9	UJ	6.7	UJ	6.1 L	JJ
ARSENIC	12.8		5.7		14.5		12.7		26.8		8.7		15.6		8.3		6.6		9.7		4.1		7.5	
BARIUM	107		71.1		179		179		115		84		106		90.4		83.1		112		63.6		79.9	
BERYLLIUM	0.69	J	0.45	J	1.3		1.5		0.56	J	0.98		1.1		0.59		0.76		0.94		0.85		0.91	
CADMIUM	2.3		2.2		4.9		2.1		4		2.8		5.9		3.2		1.3		2.6		1.3		3	
CALCIUM	65500	J	76100	J	38500	J	23200	J	36400	J	9540	J	8190	J	12600	J	8180	J	14700	J	10500	J	7650 J	J
CHROMIUM	28.7		24.3		101		47		39.7		21.9		35.7		15.3		20.7		24.7		12		24.1	
COBALT	9.7	J	6.9	J	9.4		4.4	J	9.6		4.7	J	6.3		4.5	J	3.4	J	4.3	J	2.7	J	2.7 J	J
COPPER	39.5		29.2		52.2		50.1		79.5		84		60.5		94		21.7		73.2		27.2		21.8	
IRON	27800		21200		66100		22600		57200		23100		71600		43700		15000		33400		10900		38400	
LEAD	71.8		73.3		180		126		123		125		236		102		52		111		60.1		246	
MAGNESIUM	16600	J	22000	J	7780	J	3510	J	13300	J	3400	J	2550	J	3990	J	1890	J	3520	J	2350	J	1930 J	J
MANGANESE	677 .	J	811	J	3080	J	2310	J	1190	J	581	J	984	J	538	J	575	J	1070	J	258	J	518 J	j j
NICKEL	27.2		18		22.4		14.2		22.8		20.1		22.8		15		10.7		14.4		10.5		9.6	
POTASSIUM	3710		1730		987		766	U	927	U	620	U	619	U	567	U	673	U	495		561	U	509 L	J
SELENIUM	0.73	J	1.6	J	2.4	J	2.9	J	2.3	J	1.9	J	0.48	J	0.39	J	1	J	1.3	J	1.1	J	2.8 J	J
SILVER	0.64	J	0.33	J	0.9	J	0.44	J	0.82	J	0.46	J	0.98	J	0.53	J	0.23	J	0.49	J	0.15	J	0.45 J	j j
SODIUM	1100		563	J	487	J	271	J	242	J	97.3	J	184	J	93.7	J	154	J	229	J	144	J	149 J	J
THALLIUM	5	U	7.2	U	4.5	U	3.8	U	4.6	U	3.1	U	3.1	R	2.8	U	3.4	U	2.4	U	2.8	U	2.5 L	J
VANADIUM	28.5		20.9		57.1		25.1		19.9		24.9		22.9		18.6		24.3		17.5		10.1		12.8	
ZINC	294		320		1010		524		462		551		916		251		209		373		174		306	
CYANIDE	1.3	U	1.3	J+	17.9		7.3		1.5	J+	1.2		3.7		1.4		6.1		0.53	U	0.73	J+	47.1	
MERCURY	0.15	J	0.089	J	0.51		0.3		0.16	J+	0.16		0.25		0.046	J	0.36		0.068	J	1.2		5.7	

NOTES: 1 J Indicates concentration is estimated

2 U Indicates analyte undetected by lab equipment

## Appendix A Calumet Hydrologic Master Plan (Select Portions)



CALUMET AREA HYDROLOGIC MASTER PLAN (HMP) EXECUTIVE SUMMARY (VOLUME I)

#### CALUMET AREA CITY OF CHICAGO, COOK COUNTY, ILLINOIS

(DATA AND REFERENCES ARE ACCURATE UP TO JULY 2004)

#### PREPARED FOR:

CHICAGO DEPARTMENT OF ENVIRONMENT 30 NORTH LASALLE STREET – SUITE 2500 CHICAGO, ILLINOIS 60602

#### PREPARED BY:

V3 COMPANIES, LTD. 120 NORTH LASALLE STREET CHICAGO, ILLINOIS 60602 312.419.1985

#### FUNDING PROVIDED BY:

CHICAGO DEPARTMENT OF ENVIRONMENT, ILLINOIS DEPARTMENT OF NATURAL RESOURCES C2000 PROGRAM, U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, AND A SUPPLEMENTAL ENVIRONMENTAL PROJECT WITH CHICAGO SPECIALTIES.

AUGUST 2006

### 2. STUDY AREA SUMMARIES

Site summaries are provided that illustrate the findings and general conclusions on a site by site basis for the HMP. Exhibits 1 and 2 are provided at the end of report, and reference the EMA sites of the HMP. Exhibit 1 provides an overview aerial identifying all of the sites within this study. Exhibit 2 illustrates the watershed and sub-watershed atlas of the Calumet area. Lastly, Exhibit 3 illustrates the control structure and monitoring station locations referenced within this report. All water body acreages referred to in this volume were calculated using GIS and all site specific aerial photographs used within Volume I are dated 2004.



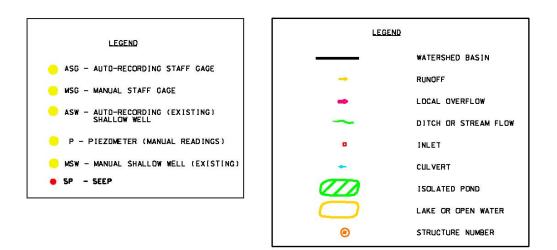
### 2.1 Big Marsh

Big Marsh is currently owned by Waste Management and is a significant hydrologic component of the Calumet area (Exhibit 1). Its drainage size is the second largest of the water bodies of the HMP study at 626 acres (Exhibit 2). In addition, the area of Big Marsh is approximately 265 acres making it the second largest EMA of the HMP study. There are eight main pools at Big Marsh, which are separated by earthen berms or narrows. Big Marsh drains directly into Lake Calumet underneath Stony Island Avenue via an outlet control structure.

V3's engineering investigation determined that there are three control structures that influence the hydrologic behavior at Big Marsh. From the north, Big Marsh is fed by Norfolk Southern Railroad Marsh. The connection structure is a 24" diameter nonadjustable culvert that conveys into a stream channel then into the Marsh itself (Figure 3; Structure #8; Vols II, IV). Resulting from stage-discharge modeling (Figure 2),



structure #8 has an acceptable discharge capacity for storm events and V3 suggests that no improvements need to be made to this control; however an annual maintenance program should exist.



\*Refer to legend for all site specific maps.

The final control structure is #14 and is a single non-adjustable 12" diameter culvert that drains 62 acres and regulates discharge from the Coke Plant to Big Marsh (Figure 7). Stage discharge relationships were developed and determined that the structure functions as designed and has an acceptable discharge capacity, the only recommendation for structure # 14 is to designate an annual maintenance program of the culvert (Volume IV).

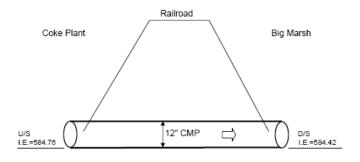


Figure 7: Structure #14, Hydraulic Geometry

As detailed in Volume V (Water Level Monitoring, Groundwater Seeps and Water Quality Monitoring Report), V3 et al. monitored water levels and water quality at Big Marsh for a one vear period. The water elevation data shows that the main pool at Big Marsh (ASG 2) is usually over a foot higher than the water at the outlet (ASG 3; Figure 8). During precipitation events, the outlet location backs up, taking significant time to drawdown. The East pools (MSG 1) of Big Marsh are always at a higher elevation than the main pool and outlet. Groundwater represented by ASW 2 (Figure 8) is responsive to precipitation events indicating a significant gross permeability of the aguifer medium, additionally groundwater elevations to the east of the main pool were always at least a foot higher than the Big Marsh main pool indicating groundwater feeds the marsh and flow is from the east. Some constituents of water quality at the Big Marsh outlet were poor. Dissolved oxygen at the Big Marsh outlet was consistently much lower than the remaining marsh (Figure 9), and was recorded at levels of concern for aquatic health (Figure 9). The oxidation/reduction potential of the water at the outlet also recorded reducing conditions for most of the year (Figure 10). V3 recommends a further detailed site specific water quality and groundwater investigation; however, this work should be conducted on an as needed basis when ecological objectives of Big Marsh have been defined.

### 2.2 Indian Ridge Marsh North

Indian Ridge Marsh North (IRM North) is approximately a 114 acre parcel consisting of several pools separated by earth berms or narrow corridor channels. Its location is north of 122<sup>nd</sup> street and west of Torrence Avenue; the western boundary of Indian Ridge Marsh North is the Norfolk/Southern Railroad tracks (Exhibit 1). The drainage size of Indian Ridge Marsh North is 185 acres at its outlet, which includes an inlet from the adjacent coke plant. The marsh drains into Indian Ridge Marsh South under 122<sup>nd</sup> street via an outlet control structure (Exhibit 2).

V3's engineering investigation determined that there are two control structures that influence the hydrologic behavior at Indian Ridge Marsh North. From the north a culvert drains areas of the Coke plant into the marsh. The connection consists of a 36" non-adjustable culvert that conveys approximately 62 acres of drainage area into Indian Ridge Marsh North (Figure 11; Structure #7; Vols II, IV). A detailed drainage investigation of the coke plant was not conducted and it is unknown which areas of thee coke plant drain to the culvert. Stage/discharge modeling indicated that this structure has an acceptable discharge capacity for storm events, and no improvement recommendations are made except for the implementation of an annual maintenance program. It is unknown whether this culvert is managed by the owners of the adjacent coke plant.

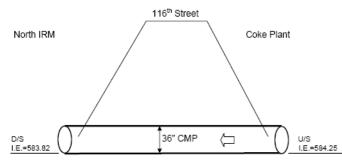
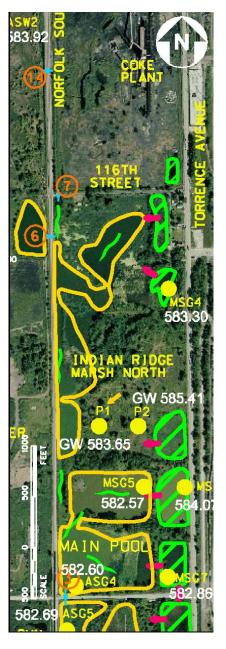


Figure 11: Structure #7, Hydraulic Geometry



The second control structure is the outlet which is an inlet box and attached 24" culvert (Figure 12; Structure #3, Vols II, and IV). The box rim sets the normal water level for the primary pool of Indian Ridge Marsh North. Through hydrologic modeling, V3 determined that this structure safely releases storm volumes; however, improvement recommendations are made due to the structure's tendency to become blocked, which restricts flows and influences water elevations (Volume IV). In 2001, Harza Inc. repaired the outlet and it was apparent that beaver levelers may be required at this location. In addition, the culvert pipe is believed to be from the 1920's and may be rusted and partially collapsed. V3 recommends inspecting and rehabilitating the

# Appendix B Laboratory Analysis and Chain of Custody Forms

	EPA	SAMPLE	NO.
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#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP2

 Lab Name: Bonner Analytical Testing Co.
 Contract: EPW14029

 Lab Code: BON
 Case No.: 47927
 MA No.: SDG No.: MESNP2

 Matrix: Soil
 Lab Sample ID: 8100326-01

 % Solids: 34.6
 Date Received: 10/24/2018

 Analytical method: Spectrophotometry
 Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): mg/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.0	J	11/02/2018	0958

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP3

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14			
Lab Code:	BON Case No.: <u>47927</u>	MA No.:		SDG No.:	MESNP2
Matrix:	Soil	Lab Sample ID:	8100326-02		
% Solids:	33.6	Date Received:	10/24/2018		
Analytical	method: Spectrophotometry				

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

Concentration Units (µg/L,			L, mg/kg dry weig	ght or μg):	mg/Kg	
Γ	CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
	57-12-5	Cyanide	1.3		11/02/2018	0959

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

	EPA SAMPLE NO.
FORM INORGANIC ANALY	
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.:SDG No.:MESNP2
Matrix: Soil	Lab Sample ID: <u>8100326-03</u>
% Solids: 48.5	Date Received: 10/24/2018
Analytical method: _Spectrophotometry	
Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry v	weight or µg):mq/Kg

57-12-5 Cyanide 17.9 11/02/2018 1000	Γ	CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
		57-12-5	Cyanide	17.9		11/02/2018	1000

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

MESNP5

mg/Kg

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: _ 47927	MA No.:	SDG No.:	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-04		
% Solids:	65.3	Date Received: 10/24/2018		

Analytical method: Spectrophotometry

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg):

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed	
57-12-5	Cyanide	8.17.3		11/02/2018	1001	
NOTE: Hardness (total) is reported in mg/L / MA 2/8/19			ł			

Comments:

ISM02.4 (10/2016)

Form I-IN

#### EPA SAMPLE NO.

#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP6

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW1	4029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:		SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID:	8100326-05	<u></u>	
% Solids:	42.8	Date Received:	10/24/2018		
Analytical	method: Spectrophotometry	· .			

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mq/Kg\_

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.5		11/02/2018	1005

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016) Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP7

164

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code:	BON Case No.: 47927	MA No.: SDG No.: MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-06
% Solids:	76.1	Date Received: 10/24/2018
Analytical	method: Spectrophotometry	

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

g)	:		mg	/K	g	
	100			1.0.0	A second second	

Γ	CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
	57-12-5	Cyanide	1.2		11/02/2018	1006
N	DTE: Hardness	(total) is repo	rted in mg/L			

Comments:

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ISM02.4 (10/2016)

Form I-IN

	EPA SAMPLE NO
	1-IN YSIS DATA SHEET MESNP8
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.:SDG No.:MESNP2
Matrix: Soil	Lab Sample ID: 8100326-07
% Solids: 70.8	Date Received: 10/24/2018
Analytical method: <u>Spectrophotometry</u>	
Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry	weight or µg):mg/Kg

CAS NO.	Analyte	Concentration	·Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	3.7		11/02/2018	1007

NOTE: Hardness (total) is reported in mg/L

Comments:

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ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP9

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166

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.: <u>MESNP2</u>
Matrix:	Soil	Lab Sample ID: 8100326-0	8
% Solids:	79.5	Date Received: 10/24/201	8
Analytical	method: Spectrophotometry	,	

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g): mq/Kq

	e Analyzed   Tim	e Analyzed
57-12-5 Cyanide 1.4 1	1/02/2018	1008

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MESNQO

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14	029		
Lab Code:	BON Case No.: 47927	MA No.:		SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID:	8100326-09		
% Solids:	66.9	Date Received:	10/24/2018		
Analytical	method: Spectrophotometry	•			

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_mg/Kq

CAS NO.	Analyte	Concentration	·Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	6.1	÷	11/02/2018	1009

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

#### EPA SAMPLE NO.

#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

mq/Kq

MESNQ1

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.:MESNP2
Matrix: Soil	Lab Sample ID: 8100326-10
% Solids: 78.6	Date Received: 10/24/2018
Analytical method: <u>Spectrophotometry</u>	

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

Date Analyzed Time Analyzed Concentration Q Analyte CAS NO. 11/02/2018 1011 Cyanide 0.53 57-12-5

NOTE: Hardness (total) is reported in  ${\rm mg/L}$ 

Comments:

ISM02.4 (10/2016)

Form I-IN

1	bУ

		EPA SAMPLE NO.
FORM INORGANIC ANALY		MESNQ2
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code: BON Case No.: 47927	MA No.:	SDG No.: MESNP2
Matrix: Soil	Lab Sample ID: <u>8100326</u> -	-11
% Solids: 82.5	Date Received: 10/24/20	)18
Analytical method: <u>Spectrophotometry</u>		
Concentration Units (µg/L, mg/L, mg/kg dry	weight or µg):	mg/Kg

CAS NO.AnalyteConcentrationQDate AnalyzedTime Analyzed57-12-5Cyanide0.7311/02/20181012

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

### EPA SAMPLE NO.

MESNQ3

mg/Kg

#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW1	4029		
Lab Code:	BON Case No.: 47927	MA No.:		SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID:	8100326-12	2	
% Solids:	83.2	Date Received:	10/24/2018		
Analytical	l method: Spectrophotometry				

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg):

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	47.1	D	11/02/2018	1014

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 3-IN BLANKS

	·	
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code: BON Case No.: 47927	MA No.:	SDG No.: MESNP2
Preparation Blank Matrix: Soil		
Preparation Blank Concentration Units (µg/L,	mg/L, mg/kg dry weight,	or μg):mg/kg
Analytical method: <u>Spectrophotometry</u>	Preparation Batch:	5J30010
Run Batch: _BK80508C110218A	Preparation Method: _	Midi-distillation Soil

	Initial Calibrati Blank (ug	lon		Preparation Blank/Leachate Extraction Blank						
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID:	· . Q	ID: PBS01	Q
Cyanide	-2.2	J	10.0	U.	0.24	J				
NOTE: Hardness (total) is reported in mg/L										

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ISM02.4 (10/2016)

Form 3-IN

	FORM	1 5A-IN	
MATRIX	SPIKE	SAMPLE	RECOVERY

MESNP5S

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.:SDG No.:_MESNP2
Matrix: Soil	Analytical Method: Spectrophotometry
% Solids: 65.3	

Concentration Units (µg/L, mg/L or mg/kg dry weight): \_\_\_\_mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR) Q	Spike Added (SA)	%R	Q.
Cyanide	75-125	15.1	8.1	7.70	100.	
· · ·		14.1	7.377	2/8/19		

ISM02.4 (10/2016)

Form 5A-IN

	FORM 6-1N DUPLICATES					
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029					
Lab Code: BON Case No.:47927	MA No.:	SDG No.: MESNP2				
Matrix: Soil	Analytical Method: _	Spectrophotometry				
% Solids: <u>65.3</u>						
Concentration Units (µg/L, mg/L, or mg/kg dry	y weight): mg/Kg	· .				

Analyte	Control Limit	Sample (S) <b>7,3</b> Q	Duplicate (D) Q	RPD	. Q		
Cyanide		8-1 m74 8	114 8.3	. 3			
NOTE: Hardness (total) is reported in mg/L $7 - 5 m \frac{2}{3} \frac{2}{3} \frac{3}{9}$							

ISM02.4 (10/2016)

Form 6-IN

### FORM 9-1N METHOD DETECTION LIMIT

Lab Name: Bonner An	alytical Testing Co.	Contract:	EPW14	4029	
Lab Code: BON	Case No.: 47927	MA No.:			SDG No.: MESNP2
Analytical Method:	Spectrophotometry	Instrument	t ID:	CN03	
Preparation Method:	Midi-distillation_Soil				
Concentration Units	(μg/L, μg, or mg/kg):	mg/Kg			

Analyte	Wavelength/Mass	MDL	Date Analyzed
Cyanide	578.000 nm	0.094	12/29/2017

FORM 9-IN

FORM 12 IN ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.						Contract: EPW14029																						
Lab Co	de:	BON				Cas	se N	lo.:	4	792	7			М	A N	o.:	-					SDG	No	.:	ME	SNP2	2	
Instru	ment	: ID:	Cl	103									Analytical Method					d:	Spectrophotometry									
Start Date:         11/02/2018         End Date:         11/0							/02	/20	18						·													
Run Ba	tch	: <u>BK8</u>	050	8C1	102	18A	L																					
EPA														Ana	lyt	es												
Sample NO.	D/F	Time	A 1	S b	A s	B a	B e	C d	C a	C r	C o	С u	F e	P b	M g	M n	H g	N i	к	S e	A g	N a	Т 1	v	. Z n	C N		
S01	1.0	0943																								х		
S02	1.0	0944															·									х		
s03	1.0	0945						·																		х		
S04	1.0	0946																								х		
S05	1.0	0947							[																	х		
S06	1.0	0948								1																х		
S07	1.0	0950				1																				х		
ICV01	1.0	0951																								х		
ICB01	1.0	0952																								х		
CCV01	1.0	0953																								х		
CCB01	1.0	0954															•									х		
BASELINE	1.0	0955		·							·															х		
PBS01	1.0	0957																								х		
MESNP2	1.0	0958																								х		
MESNP3	1.0	0959																								х		
MESNP4	1.0	1000																								х		
MESNP5	1.0	1001																								х		
MESNP5S	1:0	1.002																								х		
MESNP5D	1.0	1004																								х		
MESNP6	1.0	1005																								х		
MESNP7	1.0	1006																								X.		
MESNP8	1.0	1007																								х		
MESNP9	1.0	1008																								х		
MESNQ0	1.0	1009																								х		
MESNQ1	1.0	1011					<b> </b>																			х		
MESNQ2	1.0	1012																								х		
MESNQ3	1.0	1013																										
MESNQ3	3.0	1014																								х		
PLACEHOI	1.0	1015																										
PLACEHOI	1.0	1016					1																					

ISM02.4 (10/2016)

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	FORM 1-II	N	
INORGANIC	ANALYSIS	DATA	SHEET

MESNP2

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code:	BON Case No.: 47927	MA No.:	SDG No.: <u>MESNP2</u>
Matrix:	Soil	Lab Sample ID: <u>8100326-01</u>	
% Solids:	34.6	Date Received: 10/24/2018	
Analytical	method: <u>CVAA</u>		•

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_mg/Kg

CAS NO.	Analyte .	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.15	J	11/02/2018	1517

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET		
Contract: EPW14029		
MA No.:	SDG No.: MESNP2	
Lab Sample ID: 8100326	-02	
Date Received: 10/24/20	)18	
eight or µg):	mg/Kg	
	SIS DATA SHEET Contract: <u>EPW14029</u> MA No.: Lab Sample ID: <u>8100326</u> Date Received: <u>10/24/20</u>	

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.089	J	11/02/2018	1520
-					

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

	FORM 1-I	N		
INORGANIC	ANALYSIS	DATA	SHEET	

EPA SAMPLE NO.

MESNP4

Lab Name:	Bonner Analytical Testing Co.	Contract: <u>EPW1</u>	4029
Lab Code:	BON Case No.: 47927	MA No.:	SDG No.: <u>MESNP2</u>
Matrix:	Soil	Lab Sample ID:	8100326-03
% Solids:	48.5	Date Received:	10/24/2018
Analytical	method: <u>CVAA</u>		
Concentrat	tion Units (µg/L, mg/L, mg/kg dry w	eight or µg):	mg/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.51		11/02/2018	1522

NOTE: Hardness (total) is reported in  ${\rm mg/L}$ 

Comments:

ISM02.4 (10/2016)

Form I-IN

	_	EPA SAMPLE NO.
FORM 1 INORGANIC ANALYS		MESNP5
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code: BON Case No.: 47927	MA No.:	SDG No.: <u>MESNP2</u>
Matrix: Soil	Lab Sample ID: <u>8100326-</u>	04
% Solids: 65.3	Date Received: 10/24/20	
Analytical method: _CVAA		
Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry w	eight or µg):n	ng/Kg
	· · · · · · · · · · · · · · · · · · ·	

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.30		11/02/2018	1525

NOTE: Hardness (total) is reported in  ${\rm mg/L}$ 

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 1 IN INORGANIC ANALYSIS DATA SHEET

MESNP6

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.:MESNP
Matrix: Soil	Lab Sample ID: 8100326-05
% Solids: 42.8.	Date Received: 10/24/2018
Analytical method: <u>CVAA</u>	

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mg/Kg

CAS NO.	Analyte	Concentration	. Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.16	·J	11/02/2018	1532

NOTE: Hardness (total) is reported in mg/L

ISM02.4 (10/2016)

Form I-IN

EPA SAMPLE NO.

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP7

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.: MESNP2
Matrix: Soil	Lab Sample ID: <u>8100326-06</u>
% Solids: 76.1	Date Received: 10/24/2018
Analytical method: <u>CVAA</u>	
Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry w	eight or µg):mq/Kg

CAS NO.AnalyteConcentrationQDate AnalyzedTime Analyzed7439-97-6Mercury0.1611/02/20181535

NOTE: Hardness (total) is reported in mg/L  $\,$ 

Comments:

ISM02.4 (10/2016)

Form I-IN

#### EPA SAMPLE NO.

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

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MESNP8

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.:MESNP2
Matrix: Soil	Lab Sample ID: 8100326-07
% Solids: 70.8	Date Received: 10/24/2018
Analytical method: <u>CVAA</u>	
Concentration Units (µg/L, mg/L, mg/kg dry we	eight or μg):mq/Kg

CAS NO.AnalyteConcentrationQDate AnalyzedTime Analyzed7439-97-6Mercury0.2511/02/20181538

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

#### EPA SAMPLE NO.

#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP9

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.: <u>MESNP2</u>
Matrix:	Soil	Lab Sample ID: 8100326-08	3
% Solids:	79.5	Date Received: 10/24/2018	}
Analytical	method: CVAA		

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mg/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.046	J	11/02/2018	1540

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

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#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

LIA SAMILE NO

MESNQ0

Lab Name: B	Conner Analytical Testing Co.	Contract: EPW14029		
Lab Code <u>: B</u>	ON Case No.: <u>47927</u>	MA No.:	SDG No.:_	MESNP2
Matrix: <u>S</u>	oil	Lab Sample ID: 8100326-09		
% Solids: 6	6.9	Date Received: 10/24/2018		······
Analytical n	method: <u>CVAA</u>			

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_mg/Kg

ſ	CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
	7439-97-6	Mercury	0.36		11/02/2018	1548

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

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#### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNQ1

 Lab Name:
 Bonner Analytical Testing Co.
 Contract:
 EPW14029

 Lab Code:
 BON
 Case No.:
 47927
 MA No.:
 SDG No.:
 MESNP2

 Matrix:
 Soil
 Lab Sample ID:
 8100326-10
 Date Received:
 10/24/2018

 Analytical method:
 CVAA
 Concentration Units (µg/L, mg/L, mg/kg dry weight or µg):
 mg/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.068	J	11/02/2018	1550

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

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	FORM	1	IV			
INORGANIC	ANALY	SI	S	DATA	SHEET	

MESNQ2

Lab Name: Bonner Analytical Testing Co	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.:MESNP2
Matrix: Soil	Lab Sample ID: 8100326-11
% Solids: 82.5	Date Received: 10/24/2018
Analytical method: _CVAA	
Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry w	eight or µg):mq/Kq

CAS NO.AnalyteConcentrationQDate AnalyzedTime Analyzed7439-97-6Mercury1.211/02/20181553

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

		EPA SAMPLE NO.	
	FORM 1-IN INORGANIC ANALYSIS DATA SHEET		
Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code: BON Case No.: 47927	MA No.:	SDG No.: <u>MESNP2</u>	
Matrix: Soil	Lab Sample ID: <u>8100326</u>	-12	
% Solids: 83.2	Date Received: 10/24/20	)18	
Analytical method:			
Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry w	eight or µg):	mg/Kg	
CAS NO Analyte Concentration	n Date Ana	lyzed Time Analyzed	

CAS NO. Allalyc		~	Date Analyzeu	TIME ANALYZEU
7439-97-6 Mercu	1ry 5.7	D	11/02/2018	1606

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

#### FORM 8A-OR INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc.
Lab Code: EQI Case No.: 47927
Analytical Method:VOA
EPA Sample No.: VSTD050YN
Instrument ID: Agilent_6890N / 5973inert_MSD13
GC Column: DB-624 ID: 0.25 (mm)
Heated Purge: (Y/N) Y

Contract: EP-W-14035
MA No.: SDG No.: ESNP2
Level: Low
Lab File ID (Standard): <u>131025A03</u>
Init. Calib. Date(s): 10/24/2018 10/24/2018
Date Analyzed: <u>10/25/2018</u>
Time Analyzed: 0935

× .	IS1 AREA	RT	IS2 AREA	RT	IS3 AREA	RT
12 HOUR STD	361154	11.02	379995	7.52	206999	12.96
UPPER LIMIT	722308	11.19	759990	7.69	413998	13.13
LOWER LIMIT	180577	10.85	189998	7.35	103500	12.79
EPA SAMPLE NO.				-		
ESNP2	224587	11.02	322072	7.51	61945*	12.96
ESNP3	237522	11.02	328979	7.51	68555*	12.96
ESNP4	203419	11.02	303878	7.52	53949*	12.96
ESNP5	162142 *	11.02	269382	7.51	38581*	12.96
ESNP6	181373	11.02	288197	7.52	44691*	12.96
ESNP7	116563 *	11.02	228085	7.51	23784*	12.96
ESNQ0	146658 *	11.02	252079	7.52	34106*	12.96
ESNP6MSD	178082 *	11.02	275728	7.51	43593*	12.96
ESNP6MS	165441 *	11.02	262918	7.51	38824*	12.96
VBLKYN	362365	11.02	379262	7.51	194833	12.96

IS1 = Chlorobenzene-d5 IS2 = 1,4-Difluorobenzene IS3 = 1,4-Dichlorobenzene-d4 AREA UPPER LIMIT = 200% of internal standard area AREA LOWER LIMIT = 50% of internal standard area RT UPPER LIMIT = + 0.17 minutes of internal standard RT RT LOWER LIMIT = - 0.17 minutes of internal standard RT

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6.

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EFA SAMPLE NU.

ESNP2

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method: VOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:3.44(g/mL)	Lab File ID: 131025A05
% Solids: 24.6	Date Received: 10/23/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed: 10/25/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	30	υ
74-87-3	Chloromethane	30	U
75-01-4	Vinyl chloride	30	U
74-83-9	Bromomethane	30	U
75-00-3	Chloroethane	30	U
75-69-4	Trichlorofluoromethane	30	U
75-35-4	1,1-Dichloroethene	30	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	30	U
67-64-1	Acetone	120	B
75-15-0	Carbon disulfide	36	
79-20-9	Methyl acetate	30	U
75-09-2	Methylene chloride	30	U
156-60-5	trans-1,2-Dichloroethene	30	U
1634-04-4	Methyl tert-butyl ether	30	U
75-34-3	1,1-Dichloroethane	30	U
156-59-2	cis-1,2-Dichloroethene	30	U
78-93-3	2-Butanone	43	J
74-97-5	Bromochloromethane	30	U
67-66-3	Chloroform	30	U
71-55-6	1,1,1-Trichloroethane	30	U
110-82-7	Cyclohexane	30	U
56-23-5	Carbon tetrachloride	30	U
71-43-2	Benzene	30	U
107-06-2	1,2-Dichloroethane	30	U
79-01-6	Trichloroethene	30	U
108-87-2	Methylcyclohexane	30	U
78-87-5	1,2-Dichloropropane	30	U

Form 1A-OR

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## EPA SAMPLE NO. ESNP2

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_\_ SDG No.: \_ESNP2\_\_\_ Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-001 Sample wt/vol: <u>3.44</u> (g/mL) <u>9</u> Lab File ID: 131025A05 % Solids: 24.6 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) Date Analyzed: \_\_10/25/2018 Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: \_\_\_\_\_(uL) Soil Aliquot (VOA):\_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO. COMPOUND CONCENTRATION 0 75-27-4 Bromodichloromethane 30 U 10061-01-5 cis-1,3-Dichloropropene 30 U 108-10-1 4-Methyl-2-pentanone 59 U 108-88-3 Toluene 30 U 10061-02-6 trans-1,3-Dichloropropene 30 U 79-00-5 1,1,2-Trichloroethane 30 U 127-18-4 Tetrachloroethene 30 U 591-78-6 2-Hexanone 59 U 124-48-1 Dibromochloromethane 30 U 106-93-4 1,2-Dibromoethane 30 U 108-90-7 Chlorobenzene 30 U 100-41-4 Ethylbenzene 30 U 179601-23-1 m, p-Xylene 30 IJ 95-47-6 o-Xylene 30 U 100-42-5 Styrene 30 U 75-25-2 Bromoform 30 U Isop<u>ropylbenzene</u> 98-82-8 30 U 79-34-5 1,1,2,2-Tetrachloroethane 30 U 541-73-1 1,3-Dichlorobenzene 30 U 106-46-7 1,4-Dichlorobenzene 30 U 95-50-1 1,2-Dichlorobenzene 30 U 1,2-Dibromo-3-chloropropane 96-12-8 30 U 120-82-1 1,2,4-Trichlorobenzene 30 U 87-61-6 1,2,3-Trichlorobenzene 30 U

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EPA SAMPLE NO.

ESNP2

12-10

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:_	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Metho	d: VOA	Level:	LOW		
Matrix: Soil		Lab Sample		060-001	
Sample wt/vol:	3.44 (g/mL) g	Lab File I	D: <u>1310</u>	25A05	
% Solids: 24.6		Date Recei	ved:10/2	3/2018	
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extra			
Extract Concentr	ated: (Y/N)	Date Analy:	zed: <u>10/2</u>	5/2018	
Soil Aliquot (VO	A):(uL)				
Heated Purge: (Y	/N) Y	Extraction	Type: PT	-	· · · · ·
	5.0 (mL)	Injection N	Volume:		
Cleanup Types:		рН:	Dilution	Factor: <u>1.0</u>	
Concentration Un	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
1 556-67-2	Cyclotetrasiloxane, octamethyl-	د. د	12.19	48	NJBU
2	Unknown-01		13.54		JB
3	Unknown-02		14.71		JB
1	Unknown-03		15.90	130	JB
5					
5 7					
3					
9					
0					
1					·····
2					
3					
5					
5			l		
7		<u></u>			
3					
9					
D					
1					
2				 	
3					
±5					
6					
7					
8					
9			1		
J					
0 E966796 <sup>2</sup>	Total Alkanes		N/A		



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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP3

Lab Name:         Shealy Environmental Services, Inc.         Contract:         EP-W-14035		
Lab Code: EQI Case No.: 47927		MA No.: SDG No.: SSMP2
Analytical Method: VOA		Level:LOW
Matrix: Soil	· ·	Lab Sample ID:
Sample wt/vol: (g/mL)		Lab File ID: 131025A06
% Solids: <u>39.2</u>		Date Received: 10/23/2018
GC Column: DB-624 ID: 0.25	( mm )	Date Extracted:
GC Column: ID:	(mm)	Date Analyzed: 10/25/2018
Extract Concentrated: (Y/N)		Extract Volume: (uL)
Soil Aliquot (VOA):	(uL)	Extraction Type: PT
Heated Purge: (Y/N) Y		Injection Volume: (uL)
Purge Volume: <u>5.0</u>	(mL)	pH: Dilution Factor: 1.0
Cleanup Types:		Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/F	(g):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	14	U
67-64-1	Acetone	55	В
75-15-0	Carbon disulfide	17	
79-20-9	Methyl acetate	14	U
75-09-2	Methylene chloride	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	25	J
74-97-5	Bromochloromethane	14	U
67-66-3	Chloroform		U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U

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# EPA SAMPLE NO. ESNP3

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-002 Sample wt/vol: \_\_\_\_\_ 4.64 (g/mL) 9 Lab File ID: \_\_\_\_\_131025A06 % Solids: 39.2 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/25/2018 Extract Volume. \_\_\_\_\_(uL) Extract Concentrated: (Y/N)\_\_\_\_\_ Soil Aliquot (VOA):\_\_\_\_\_ (uL) Extraction Type:\_\_\_PT\_\_ Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-pentanone	27	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	27	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
179601-23-1	m, p-Xylene	14	U
95-47-6	o-Xylene	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	. 14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U
87-61-6	1,2,3-Trichlorobenzene	14	U

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

ESNP3

Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method: VOA	
Matrix: Soil	
Sample wt/vol: 4.64 (g/mL) g	
% Solids: 39.2	
GC Column: DB-624 ID: 0.25	(mm)
Extract Concentrated: (Y/N)	
Soil Aliquot (VOA):	(uL)
Heated Purge: (Y/N) Y	
Purge Volume: 5.0	. (mL)
Cleanup Types:	
Concentration Units (ug/L, ug/Kg):	ug/kg

Contract: EP-W-14035

MA No.:	SDG No.:	ESNP2	
Level: LOW			
Lab Sample ID:	TJ23060-002		
Lab File ID:	131025A06		
Date Received:	10/23/2018		
Date Extracted:			
Date Analyzed:	10/25/2018		
Extract Volume:			(uL)
Extraction Type	:PT		
Injection Volum			
pH: Dilu	tion Factor:	1.0	
Cleanup Factor:			

CAS NUMBER COMPOUND NAME RT EST. CONC. Q 01 127-91-3 .beta.-Pinene 12.46 20 NJ 13.54 Unknown-01 19 JΒ 02 14.71 21 03 Unknown-02 JB 15.90 14 04 JB Unknown-03 Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro 05 473-13-2 16.70 71 NJ 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 E966796<sup>2</sup> N/A Total Alkanes

<sup>2</sup>EPA-designated Registry Number.

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

TARGET ANA	1 ce
Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	Contract: <u>EP-W-14035</u> MA No.: SDG No.: <u>ESNP2</u>
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:4.63 (g/mL)	
% Solids: <u>39.2</u>	Date Received: <u>10/23/2018</u>
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed: 10/29/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	14	U
67-64-1	Acetone	52	
75-15-0	Carbon disulfide	18	
79-20-9	Methyl acetate	14	U
75-09-2	Methylene chloride	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	22	J
74-97-5	Bromochloromethane	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U

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EPA SAMPLE NO.

ESNP3RE

# HRS Page Number 115

:

# EPA SAMPLE NO. ESNP3RE

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_\_ SDG No.: \_ ESNP2 Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-002 Sample wt/vol: \_\_\_\_\_4.63 \_\_\_(g/mL) \_\_\_\_ Lab File ID: \_\_\_\_\_ 131029A05 % Solids: 39.2 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted:\_\_\_\_\_ GC Column:\_\_\_\_\_ ID:\_\_\_\_\_(mm) Date Analyzed: 10/29/2018 Extract Volume: \_\_\_\_\_ (uL) Extract Concentrated: (Y/N)\_\_\_\_\_ Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: <u>PT</u> Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-pentanone	28	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	28	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
179601-23-1	m, p-Xylene	14	U
95-47-6	o-Xylene	14	U .
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U
87-61-6	1,2,3-Trichlorobenzene	14	U

EPA SAMPLE NO.

ESNP3RE

Lab Name: Shealy Environmental Services, Inc.		Contract: <u>EP-W-14035</u>			
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Method	:	Level: LO	W		
Matrix: Soil		Lab Sample II	D: TJ23	060-002	
Sample wt/vol: 4.63 (g/mL) g		Lab File ID: 131029A05			
% Solids: 39.2		Date Received: 10/23/2018			
GC Column: DB-624	ID: 0.25 (mm)	Date Extracte	ed:		
Extract Concentrat	ted: (Y/N)	Date Analyzed	d: <u>10/2</u>	9/2018	
	): (uL)	Extract Volur	me:		(uL)
	N) Y	Extraction Ty	ype:PT	-	
Purge Volume: <u>5.</u>	(mL)	Injection Vol	lume:		
Cleanup Types:		рН: D:	ilution	Factor: <u>1.0</u>	
Concentration Unit	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Facto			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		13.54	1	JB
02	Unknown-02		14.71		JB
03	Unknown-03		15.90	79	JB
)4					
05					
07					
08					
09					
LO					
11					
12					
L3					
14					
L 6					
L7					
18					
19					
20					
21					
22					
24	***				
25					
26					
27					
28					
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A		

<sup>2</sup>EPA-designated Registry Number.

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP4

Lab Name: Shealy Environmental Services, Inc.	ces, Inc. Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2		
Analytical Method: VOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol: (g/mL)	Lab File ID: 131025A07		
% Solids:	Date Received: 10/23/2018		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed: 10/25/2018		
Extract Concentrated: (Y/N)	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: PT		
Heated Purge: (Y/N) Y	Injection Volume:(uL)		
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q	
75-71-8	Dichlorodifluoromethane	19	U	
74-87-3	Chloromethane	19	U	
75-01-4	Vinyl chloride	19	U	
74-83-9	Bromomethane	19	U	
75-00-3	Chloroethane	19	U	
75-69-4	Trichlorofluoromethane	19	U	]
75-35-4	1,1-Dichloroethene	19	U	Tart
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	19	U	] 10-18
67-64-1	Acetone	82	ø	12-10
75-15-0	Carbon disulfide	19	U	
79-20-9	Methyl acetate	19	U	]
75-09-2	Methylene chloride	19	U	
156-60-5	trans-1,2-Dichloroethene		U	]
1634-04-4	Methyl tert-butyl ether	19	U	
75-34-3	1,1-Dichloroethane	19	U	]
156-59-2	cis-1,2-Dichloroethene	19	U	
78-93-3	2-Butanone	33	1 A	Keep 31
74-97-5	Bromochloromethane	19	U	acht-12-16
67-66-3	Chloroform	19	U	act in
71-55-6	1,1,1-Trichloroethane	19	U	12-12-10
110-82-7	Cyclohexane	19	U	] .
56-23-5	Carbon tetrachloride	19	U	
71-43-2	Benzene	19	U	]
107-06-2	1,2-Dichloroethane	19	U	]
79-01-6	Trichloroethene	19	U	]
108-87-2	Methylcyclohexane	19	U	]
78-87-5	1,2-Dichloropropane	19	U	

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# EPA SAMPLE NO. ESNP4

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_\_ SDG No.: ESNP2 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-003 Sample wt/vol: \_\_\_\_\_ (g/mL) \_\_\_\_ Lab File ID: \_\_\_\_\_\_ 131025A07 % Solids: 28.9 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: \_\_\_\_\_(uL) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
108-10-1	4-Methyl-2-pentanone	37	U
108-88-3	Toluene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
79-00-5	1,1,2-Trichloroethane	19	U
127-18-4	Tetrachloroethene	19	U
591-78-6	2-Hexanone	37	U
124-48-1	Dibromochloromethane	19	U
106-93-4	1,2-Dibromoethane	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
179601-23-1	m, p-Xylene	19	U
95-47-6	o-Xylene	19	U
100-42-5	Styrene	19	U
75-25-2	Bromoform	19	U
98-82-8	Isopropylbenzene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
541-73-1	1,3-Dichlorobenzene	19	U
106-46-7	1,4-Dichlorobenzene	19	U
95-50-1	1,2-Dichlorobenzene	19	U
96-12-8	1,2-Dibromo-3-chloropropane	19	U
120-82-1	1,2,4-Trichlorobenzene	19	U
87-61-6	1,2,3-Trichlorobenzene	19	U

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EPA SAMPLE NO.

ESNP4

Lab Name: Shealy Er	vironmental Services, Inc.	Contract: <u>EP-V</u>	V-14035			
Lab Code: EQI	Case No.: 47927	MA No.:	SI	G No.:_	ESN	2
Analytical Method	i: VOA	Level: LOW	/			
Matrix: Soil		Lab Sample ID:		060-003		
Sample wt/vol:	4.67 (g/mL) g	Lab File ID: _	1310	25A07		
% Solids: 28.9		Date Received	:10/2	3/2018		
GC Column: DB-624	ID: 0.25 (mm)	Date Extracted	A			
Extract Concentra	ated: (Y/N)	Date Analyzed	10/2	5/2018		
Soil Aliquot (VOA	A): (uL)	Extract Volume	e:			(uL)
	YN) Y	Extraction Typ	pe:PT	• 		
	.0(mL)	Injection Volu	ume:			
Cleanup Types:		pH: Di	lution	Factor:	1.0	
Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Factor				
CAS NUMBER	COMPOUND NAME		RT	EST. CO	NC.	Q
01470-82-6	Eucalyptol		13.03		40	NJ
02	Unknown-01		13.54		49	JB
03 546-80-5	Thujone		13.99		90	NJ
04	Unknown-02		14.71		87	JB
05	Unknown-03		15.90		84	JB
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E966796 <sup>2</sup>			N/A			

<sup>2</sup>EPA-designated Registry Number.

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO. ESNP4RE

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:4.53 (g/mL)	
% Solids:	Date Received: 10/23/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed: 10/29/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q	
75-71-8	Dichlorodifluoromethane	19	U	<b>ו</b>
74-87-3	Chloromethane	19	U	]
75-01-4	Vinyl chloride	19	U	]
74-83-9	Bromomethane	19	U	1
75-00-3	Chloroethane	19	U	
75-69-4	Trichlorofluoromethane	19	U	]
75-35-4	1,1-Dichloroethene	19	U	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	19	U	
67-64-1	Acetone	60		]
75-15-0	Carbon disulfide	19	U	]
79-20-9	Methyl acetate	19	U	]
75-09-2	Methylene chloride	19	U	]
156-60-5	trans-1,2-Dichloroethene	19	U	
1634-04-4	Methyl tert-butyl ether	19	U	]
75-34-3	1,1-Dichloroethane	19	U	
156-59-2	cis-1,2-Dichloroethene	19	U	]
78-93-3	2-Butanone	26	đ	۱ [
74-97-5	Bromochloromethane	19	U	
67-66-3	Chloroform	19	U	]
71-55-6	1,1,1-Trichloroethane	19	U	]
110-82-7	Cyclohexane	. 19	U	]
56-23-5	Carbon tetrachloride	19	U	
71-43-2	Benzene	19	U	]
107-06-2	1,2-Dichloroethane	19	U	
79-01-6	Trichloroethene	19	ט '	]
108-87-2	Methylcyclohexane	19	U	
78-87-5	1,2-Dichloropropane	19	U	

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# EPA SAMPLE NO. ESNP4RE

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI MA No.: \_\_\_\_\_\_ SDG No.: \_ESNP2 Case No.: 47927 Level: \_\_\_\_LOW Analytical Method: VOA Matrix: Soil Sample wt/vol: 4.53 (g/mL) 9 Lab File ID: \_\_\_\_\_131029A06 % Solids: 28.9 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/29/2018 Extract Concentrated: (Y/N)\_\_\_\_ Extract Volume: \_\_\_\_\_(uL) Soil Aliquot (VOA):\_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) ------Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor:\_\_\_\_\_ ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
108-10-1	4-Methyl-2-pentanone	38	U
108-88-3	Toluene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
79-00-5	1,1,2-Trichloroethane	19	U
127-18-4	Tetrachloroethene	19	U
591-78-6	2-Hexanone	38	U
124-48-1	Dibromochloromethane	19	U
106-93-4	1,2-Dibromoethane	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
179601-23-1	m, p-Xylene	19	U
95-47-6	o-Xylene	19	U
100-42-5	Styrene	19	U
75-25-2	Bromoform	19	U
98-82-8	Isopropylbenzene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
541-73-1	1,3-Dichlorobenzene	19	U
106-46-7	1,4-Dichlorobenzene	19	U
95-50-1	1,2-Dichlorobenzene	19	U
96-12-8	1,2-Dibromo-3-chloropropane	19	U
120-82-1	1,2,4-Trichlorobenzene	19	U
87-61-6	1,2,3-Trichlorobenzene	19	U

EPA SAMPLE NO.

ESNP4RE

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
	d:	Level:	_OW		
Matrix: Soil		Lab Sample		060-003	
Sample wt/vol:	4.53 (g/mL) g	Lab File ID	1310	)29A06	
% Solids: 28.9		Date Receiv	red:10/2	3/2018	
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extrac	ted:		
Extract Concentra	ated: (Y/N)	Date Analyz	ed: 10/2	9/2018	
	A): (uL)	Extract Vol			(uL)
	/N)Y	Extraction			
	5.0 (mL)	Injection V			
-		рН:			
	its (ug/L, ug/Kg): <mark>ug/kg</mark>	Cleanup Fac			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		13.54	36	JB
02	Unknown-02		13.84	22	J
03	Unknown-03		14.71	98	JB
04	Unknown-04		15.90	64	JB
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30 E966796 <sup>2</sup>	Total Alkanes		N/A		
<sup>2</sup> EPA-designated R		<u> </u>		1	1

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNP5

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ESNP2		
Analytical Method: VOA	Level: LOW		
Matrix: Soil	Lab Sample ID:TJ23060-004		
Sample wt/vol: (g/mL)			
% Solids:65.3	Date Received: 10/23/2018		
GC Column: DB-624 ID: 0.25 (mm	) Date Extracted:		
GC Column: ID: (mm	Date Analyzed: 10/25/2018		
Extract Concentrated: (Y/N)	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: PT		
Heated Purge: (Y/N) Y	_ Injection Volume: (uL)		
Purge Volume: 5.0 (mL)	) pH: Dilution Factor: 1.0		
Cleanup Types:	_ Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	9.3	U
74-87-3	Chloromethane	9.3	U
75-01-4	Vinyl chloride	9.3	U
74-83-9	Bromomethane	9.3	U
75-00-3	Chloroethane	9.3	U
75-69-4	Trichlorofluoromethane	9.3	U
75-35-4	1,1-Dichloroethene	9.3	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	9.3	U
67-64-1	Acetone	19	U
75-15-0	Carbon disulfide	9.3	U
79-20-9	Methyl acetate	9.3	U
75-09-2	Methylene chloride	9.3	U
156-60-5	trans-1,2-Dichloroethene	9.3	Ŭ
1634-04-4	Methyl tert-butyl ether	9.3	U
75-34-3	1,1-Dichloroethane	9.3	U
156-59-2	cis-1,2-Dichloroethene	9.3	U
78-93-3	2-Butanone	19	U
74-97-5	Bromochloromethane	9.3	U
67-66-3	Chloroform	9.3	U
71-55-6	1,1,1-Trichloroethane	9.3	U
110-82-7	Cyclohexane	9.3	U
56-23-5	Carbon tetrachloride	9.3	U
71-43-2	Benzene	9.3	U
107-06-2	1,2-Dichloroethane	9.3	U
79-01-6	Trichloroethene	9.3	U
108-87-2	Methylcyclohexane	9.3	U
78-87-5	1,2-Dichloropropane	9.3	U

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# EPA SAMPLE NO. ESNP5

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: ESNP2 Lab Code: EQI Case No.: 47927 Level: \_\_\_\_LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-004 Sample wt/vol: \_\_\_\_\_4.13 \_\_\_(g/mL) \_\_\_\_ Lab File ID: \_\_\_\_\_131025A08 % Solids: \_\_\_\_65.3 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/25/2018 Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	9.3	U
10061-01-5	cis-1,3-Dichloropropene	9.3	U
108-10-1	4-Methyl-2-pentanone	19	U
108-88-3	Toluene	9.3	U
10061-02-6	trans-1,3-Dichloropropene	9.3	U
79-00-5	1,1,2-Trichloroethane	9.3	U
127-18-4	Tetrachloroethene	9.3	U
591-78-6	2-Hexanone	19	U
124-48-1	Dibromochloromethane	9.3	U
106-93-4	1,2-Dibromoethane	9.3	U
108-90-7	Chlorobenzene	9.3	U
100-41-4	Ethylbenzene	9.3	U
179601-23-1	m, p-Xylene	9.3	U
95-47-6	o-Xylene	9.3	U
100-42-5	Styrene	9.3	U
75-25-2	Bromoform	9:3	U
98-82-8	Isopropylbenzene	9.3	U
79-34-5	1,1,2,2-Tetrachloroethane	9.3	U
541-73-1	1,3-Dichlorobenzene	9.3	U
106-46-7	1,4-Dichlorobenzene	9.3	U
95-50-1	1,2-Dichlorobenzene	9.3	U
96-12-8	1,2-Dibromo-3-chloropropane	9.3	U
120-82-1	1,2,4-Trichlorobenzene	9.3	U
87-61-6	1,2,3-Trichlorobenzene	9.3	U

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EPA SAMPLE NO.

ESNP5

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:	EP-W-14035			
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2	
Analytical Metho	d:	Level:	LOW			
Matrix: Soil		Lab Sample	ID: TJ23	060-004		
Sample wt/vol:	4.13 (g/mL) g	Lab File I				
% Solids: 65.3		Date Recei	ved: <u>10/2</u>	3/2018		
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extra	cted:			
Extract Concentr	ated: (Y/N)	Date Analy	zed:10/2	5/2018		
Soil Aliquot (VO	A):(uL)	Extract Vo	lume:		(uL)	
	/N)_Y	Extraction	Type:PI	-		
	5.0 (mL)	Injection '	Volume:			
Cleanup Types:	· · ·	pH:	Dilution	Factor: <u>1.0</u>		
	its (ug/L, ug/Kg): <u>ug/kg</u>					. 1
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q	act
1 556-67-2	Cyclotetrasiloxane, octamethyl-	C.C.	12.18	13	MARN	12-10 -10
)2	Unknown-01		13.54	25	JB	
)3	Unknown-02		14.71		JB	
	Unknown-03	<u></u>	15.90	43	JB	
06						
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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

TARGET ANA	LYTE LIST	11sed
Lab Name : Shealy Environmental Services, Inc.	LYTE LIST ESNP5RE	c A a
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2 0	~30´(%
Analytical Method: VOA	Level:LOW	
Matrix: Soil	Lab Sample ID:	
Sample wt/vol:4.33 (g/mL)		
% Solids:65.3	Date Received: 10/23/2018	
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:	
GC Column: ID: (mm)	Date Analyzed:10/29/2018	
Extract Concentrated: (Y/N)	Extract Volume: (uL)	
Soil Aliquot (VOA): (uL)	Extraction Type:PT	
Heated Purge: (Y/N) Y	Injection Volume: (uL)	
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0	
Cleanup Types:	Cleanup Factor:	
Concentration Units (ug/L, mg/L, ug/Kg):	_ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	8.8	U
74-87-3	Chloromethane	8.8	U
75-01-4	Vinyl chloride	8.8	U
74-83-9	Bromomethane	8.8	U
75-00-3	Chloroethane	8.8	U
75-69-4	Trichlorofluoromethane	8.8	U
75-35-4	1,1-Dichloroethene	8.8	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	8.8	U
67-64-1	Acetone	18	U
75-15-0	Carbon disulfide	2.6	J
79-20-9	Methyl acetate	8.8	U
75-09-2	Methylene chloride	8.8	U
156-60-5	trans-1,2-Dichloroethene	8.8	U
1634-04-4	Methyl tert-butyl ether	8.8	U
75-34-3	1,1-Dichloroethane	8.8	U
156-59-2	cis-1,2-Dichloroethene	8.8	U
78-93-3	2-Butanone	18	U
74-97-5	Bromochloromethane	8.8	U
67-66-3	Chloroform	8.8	U
71-55-6	1,1,1-Trichloroethane	8.8	U
110-82-7	Cyclohexane	8.8	U
56-23-5	Carbon tetrachloride	8.8	U
71-43-2	Benzene	8.8	U
107-06-2	1,2-Dichloroethane	8.8	U
79-01-6	Trichloroethene	8.8	U
108-87-2	Methylcyclohexane	8.8	U
78-87-5	1,2-Dichloropropane	8.8	U

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EPA SAMPLE NO.

ESNP5RE

# EPA SAMPLE NO. ESNP5RE

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_\_ SDG No.: \_ESNP2\_\_\_\_ Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Lab Sample ID: \_\_\_\_\_ Matrix: Soil Sample wt/vol: \_\_\_\_\_\_ 4.33 (g/mL) \_\_\_\_\_ Lab File ID: \_\_\_\_\_131029A07 Date Received: 10/23/2018 % Solids: 65.3 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: Date Analyzed: \_\_\_\_\_10/29/2018 GC Column: \_\_\_\_\_ ID: \_\_\_\_ (mm) Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: \_\_\_\_\_(uL) Extraction Type: PT Soil Aliquot (VOA):\_\_\_\_\_ (uL) Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) pH: \_\_\_\_\_ Dilution Factor: 1.0\_\_\_\_\_ Purge Volume: <u>5.0</u> (mL) Cleanup Factor: Cleanup Types:\_\_\_\_\_ Concentration Units (ug/L, mg/L, ug/Kg): ug/kg CAS NO. COMPOUND CONCENTRATION Q 75-27-4 8.8 U Bromodichloromethane 8.8 cis-1,3-Dichloropropene U 10061-01-5 18 U 4-Methyl-2-pentanone 108-10-1 U 8.8 108-88-3 Toluene 10061-02-6 trans-1,3-Dichloropropene 8.8 U 8.8 U 79-00-5 1,1,2-Trichloroethane 8.8 U 127-18-4 Tetrachloroethene 591-78-6 2-Hexanone 18 U 124-48-1 8.8 U Dibromochloromethane 106-93-4 8.8 U 1,2-Dibromoethane 8.8 U 108-90-7 Chlorobenzene 100-41-4 Ethylbenzene 8.8 U 179601-23-1 m, p-Xylene 8.8 U

95-47-6 o-Xylene 8.8 U 8.8 U 100-42-5 Styrene 75-25-2 Bromoform 8.8 U 8.8 Isopropylbenzene U 98-82-8 8.8 U 79-34-5 1,1,2,2-Tetrachloroethane U 541-73-1 1,3-Dichlorobenzene 8.8 106-46-7 8.8 U 1,4-Dichlorobenzene 95-50-1 8.8 U 1,2-Dichlorobenzene 96-12-8 1,2-Dibromo-3-chloropropane 8.8 U 1,2,4-Trichlorobenzene U 120-82-1 8.8 87-61-6 1,2,3-Trichlorobenzene 8.8 U

EPA SAMPLE NO.

ESNP5RE

Lab Name: Shealy Environmenta	I Services, Inc.	Contract:_	EP-W-14035		
Lab Code: EQI Case	e No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Method: VOA		Level:			
Matrix: Soil		Lab Sample		8060-004	
Sample wt/vol: 4.33	(g/mL) <b>g</b>	Lab File I			
% Solids: 65.3		Date Receiv	ved: 10/2	3/2018	• •
GC Column: DB-624 II	D: 0.25 (mm)	Date Extra	cted:		
Extract Concentrated: (Y	/N)	Date Analy:	zed: <u>10/2</u>	9/2018	
Soil Aliquot (VOA):		Extract Vol	lume:		(uL
Heated Purge: (Y/N) Y		Extraction	Type: Pl		
Purge Volume: 5.0		Injection V	Volume:		
Cleanup Types:		рН <b>:</b>	Dilution	Factor: <u>1.0</u>	
Concentration Units (ug/	L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	ctor:		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
	1-01 Cyclotetras	iloxane oct			JR (
Unknowr			13.54	1	JB
Unknowr Unknowr			14.71 15.90		JB TD
	1-04		10.90	02	JB
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E966796 <sup>2</sup> Total A			N/A		

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:SNP2
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:3.61 (g/mL)	Lab File ID: 131025A09
% Solids: 44.3	Date Received:10/23/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed: <u>10/25/2018</u>
Extract Concentrated: (Y/N)	Extract Volume: (uI)
Soil Aliquot (VOA): (uL)	Extraction Type:PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	16	U
74-87-3	Chloromethane	16	U
75-01-4	Vinyl chloride	16	U
74-83-9	Bromomethane	16	U
75-00-3	Chloroethane	16	U.
75-69-4	Trichlorofluoromethane	16	U
75-35-4	1,1-Dichloroethene	16	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	16	U
67-64-1	Acetone	26	JØ
75-15-0	Carbon disulfide	16	Ū
79-20-9	Methyl acetate	16	IJ
75-09-2	Methylene chloride	16	U
156-60-5	trans-1,2-Dichloroethene	16	U
1634-04-4	Methyl tert-butyl ether	16	U
75-34-3	1,1-Dichloroethane	16	U
156-59-2	cis-1,2-Dichloroethene	16	U
78-93-3	2-Butanone	31	U
74-97-5	Bromochloromethane	16	U
67-66-3	Chloroform	16	U
71-55-6	1,1,1-Trichloroethane	16	U
110-82-7	Cyclohexane	16	U
56-23-5	Carbon tetrachloride	16	U
71-43-2	Benzene	16	U
107-06-2	1,2-Dichloroethane	16	U
79-01-6	Trichloroethene	16	U
108-87-2	Methylcyclohexane	16	υ
78-87-5	1,2-Dichloropropane	16	U

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Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: VOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: <u>3.61</u> (g/mL) <u>9</u>	Lab File ID:131025A09
% Solids:44.3	Date Received: 10/23/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column:ID:(mm)	Date Analyzed: 10/25/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
108-10-1	4-Methyl-2-pentanone	31	U
108-88-3	Toluene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
79-00-5	1,1,2-Trichloroethane	16	U
127-18-4	Tetrachloroethene	16	U
591-78-6	2-Hexanone	42	В
124-48-1	Dibromochloromethane	16	U
106-93-4	1,2-Dibromoethane	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
179601-23-1	m, p-Xylene	16	U
95-47-6	o-Xylene	16	U
100-42-5	Styrene	16	U
75-25-2	Bromoform	16	U
98-82-8	Isopropylbenzene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
95-50-1	1,2-Dichlorobenzene	16	<u> </u>
96-12-8	1,2-Dibromo-3-chloropropane	.16	U
120-82-1	1,2,4-Trichlorobenzene	16	U
87-61-6	1,2,3-Trichlorobenzene	16	U

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EPA SAMPLE NO.

ESNP6

Lab Name: Shealy	Environmental Services, Inc.	Contract:_	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Meth	Nod: VOA	Level:			
Matrix: Soil		Lab Sample	ID: TJ23	060-005	
Sample wt/vol:	3.61 (g/mL) g	Lab File I			
% Solids: 44.3		Date Recei			
GC Column: DB-6	24 ID: 0.25 (mm)	Date Extra	cted:		
Extract Concent	rated: (Y/N)	Date Analy			
	OA):(uL)				(uL)
	Y/N) Y	Extraction			
	5.0 (mL)				
				Factor: <u>1.0</u>	
	nits (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fa			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
556-67-2	Cyclotetrasiloxane, octamethyl-	C. C.	12.18	20	NJJER
106-68-3	3-Octanone		12.66	24	NJ
470-82-6	Eucalyptol		13.03	23	NJ
	Unknown-01		13.54	43	JB
	Unknown-02		14.71	130	JB
	Unknown-03		15.90	100	JB
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E966796 <sup>2</sup>	Total Alkanaa		N/A		
	Total AlkanesRegistry Number.C.		•••••••••••••••••••••••••••••••••••••••	pratory C	ontanin

SOM02.4 (10/2016)

Form 1B-OR

# EPA SAMPLE NO. ESNP6MS

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ESNP2 Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Lab Sample ID: TJ23060-005MS Matrix: Soil Sample wt/vol: 3.98 (g/mL) 9 Lab File ID: \_\_\_\_\_131025A12 % Solids: 44.3 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/25/2018 Extract Volume: \_\_\_\_\_ (uL) Extract Concentrated: (Y/N)\_\_\_\_\_ Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: 5.0 (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	99	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	14	U
67-64-1	Acetone	29	ø
75-15-0	Carbon disulfide	14	Ŭ
79-20-9	Methyl acetate	6.9	J
75-09-2	Methylene chloride	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	28	U
74-97-5	Bromochloromethane	14	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon tetrachloride	14	U
71-43-2	Benzene	180	
107-06-2	1,2-Dichloroethane	14	U
79-01-6	Trichloroethene	100	
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U

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Form 1A-OR

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# EPA SAMPLE NO. ESNP6MS

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_\_ SDG No.: \_ESNP2 Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Lab Sample ID: \_\_\_\_\_ Matrix: Soil Lab File ID: \_\_\_\_\_131025A12 Sample wt/vol: 3.98 (g/mL) 9 % Solids: 44.3 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column: ID: (mm) Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: \_\_\_\_\_(uL) Extraction Type:\_\_PT\_\_\_\_ Soil Aliquot (VOA):\_\_\_\_ \_\_\_\_\_ (uL) Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Purge Volume: <u>5.0</u> (mL) Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-pentanone	28	U
108-88-3	Toluene	140	
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	48	ø
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	84	
100-41-4	Ethylbenzene	14	U
179601-23-1	m, p-Xylene	14	U
95-47-6	o-Xylene	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U
87-61-6	1,2,3-Trichlorobenzene	14	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6MSD

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2	
Analytical Method: VOA	Level:LOW	
Matrix: Soil	Lab Sample ID:	
Sample wt/vol:3.52(g/mL)	Lab File ID: 131025A13	
% Solids: 44.3	Date Received: <u>10/23/2018</u>	
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:	
GC Column: ID: (mm)	Date Analyzed: <u>10/25/2018</u>	
Extract Concentrated: (Y/N)	Extract Volume:(uL)	
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>	
Heated Purge: (Y/N) Y	Injection Volume: (uL)	
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0	
Cleanup Types:	Cleanup Factor:	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg	

				٦
CAS NO.	COMPOUND	CONCENTRATION	Q	
75-71-8	Dichlorodifluoromethane	16	U	
74-87-3	Chloromethane	16	U	
75-01-4	Vinyl chloride	16	U	]
74-83-9	Bromomethane	16	U	1
75-00-3	Chloroethane	16	U	1
75-69-4	Trichlorofluoromethane	16	U	1
75-35-4	1,1-Dichloroethene	120		1
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	16	U	1
67-64-1	Acetone	37	ß	1
75-15-0	Carbon disulfide	16	U	יך
79-20-9	Methyl acetate	8.9	J	1
75-09-2	Methylene chloride	16	U	1
156-60-5	trans-1,2-Dichloroethene	16	U	1
1634-04-4	Methyl tert-butyl ether	16	U	1
75-34-3	1,1-Dichloroethane	16	U	1
156-59-2	cis-1,2-Dichloroethene	16	U	1
78-93-3	2-Butanone	32	U	1
74-97-5	Bromochloromethane	16	υ	1
67-66-3	Chloroform	16	U	1
71-55-6	1,1,1-Trichloroethane	16	U	1
110-82-7	Cyclohexane	16	U	1
56-23-5	Carbon tetrachloride	16	U	1
71-43-2	Benzene	210		1
107-06-2	1,2-Dichloroethane	16	U	1
79-01-6	Trichloroethene	130		1
108-87-2	Methylcyclohexane	16	U	1
78-87-5	1,2-Dichloropropane	16	U	1

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## EPA SAMPLE NO. ESNP6MSD

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Contract: EP-W-14035 Lab Name: Shealy Environmental Services, Inc. Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Level: \_\_\_\_\_LOW Analytical Method: VOA Lab Sample ID: \_\_\_\_\_\_\_ Sample wt/vol: \_\_\_\_\_3.52 (g/mL) g\_\_\_\_\_ Lab File ID: \_\_\_\_\_\_ 131025A13 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: Date Analyzed: 10/25/2018 GC Column: \_\_\_\_\_ ID: \_\_\_\_ (mm) Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: \_\_\_\_\_ (uL) Extraction Type: <u>PT</u>\_\_\_\_\_ Soil Aliquot (VOA):\_\_\_\_ \_\_\_\_\_ (uL) Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Purge Volume: <u>5.0</u> (mL) Cleanup Factor: \_\_\_\_\_ Cleanup Types:\_\_\_\_\_

ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

Matrix: Soil

% Solids: 44.3

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
108-10-1	4-Methyl-2-pentanone	32	U
108-88-3	Toluene	170	
10061-02-6	trans-1,3-Dichloropropene	16	U
79-00-5	1,1,2-Trichloroethane	16	U
127-18-4	Tetrachloroethene	16	U
591-78-6	2-Hexanone	47	В
124-48-1	Dibromochloromethane	16	U
106-93-4	1,2-Dibromoethane	16	U
108-90-7	Chlorobenzene	110	
100-41-4	Ethylbenzene	16	U
179601-23-1	m, p-Xylene	16	U
95-47-6	o-Xylene	16	U
100-42-5	Styrene	16	U
75-25-2	Bromoform	16	U
98-82-8	Isopropylbenzene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
95-50-1	1,2-Dichlorobenzene	16	U
96-12-8	1,2-Dibromo-3-chloropropane	16	U
120-82-1	1,2,4-Trichlorobenzene	16	U
87-61-6	1,2,3-Trichlorobenzene	16	U

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# EPA SAMPLE NO. ESNP7

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ESNP2 Level: LOW Analytical Method: VOA Lab Sample ID: TJ23060-006 Matrix: Soil Sample wt/vol: \_\_\_\_\_\_3.61 \_\_\_\_(g/mL) \_\_\_\_\_ Lab File ID: \_\_\_\_\_131025A10 % Solids: 70.5 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) Date Analyzed: 10/25/2018 Extract Volumo: \_\_\_\_\_ (uL) Extract Concentrated: (Y/N) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type:\_\_PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) Purge Volume: 5.0 (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	9.8	U
74-87-3	Chloromethane	9.8	U
75-01-4	Vinyl chloride	9.8	U
74-83-9	Bromomethane	9.8	U
75-00-3	Chloroethane	9.8	U
75-69-4	Trichlorofluoromethane	9.8	U
75-35-4	1,1-Dichloroethene	9.8	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	9.8	U
67-64-1	Acetone	19	JØ
75-15-0	Carbon disulfide	9.8	Ŭ
79-20-9	Methyl acetate	9.8	U
75-09-2	Methylene chloride	9.8	U
156-60-5	trans-1,2-Dichloroethene	9.8	U
1634-04-4	Methyl tert-butyl ether	9.8	U
75-34-3	1,1-Dichloroethane	9.8	U
156-59-2	cis-1,2-Dichloroethene	9.8	U
78-93-3	2-Butanone	20	U
74-97-5	Bromochloromethane	9.8	U
67-66-3	Chloroform	9.8	U
71-55-6	1,1,1-Trichloroethane	9.8	U
110-82-7	Cyclohexane	9.8	U
56-23-5	Carbon tetrachloride	9.8	U
71-43-2	Benzene	9.8	U
107-06-2	1,2-Dichloroethane	9.8	U
79-01-6	Trichloroethene	9.8	U
108-87-2	Methylcyclohexane	5.4	J
78-87-5	1,2-Dichloropropane	9.8	U

Form 1A-OR

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## EPA SAMPLE NO. ESNP7

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_\_ SDG No.: \_ ESNP2 Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Matrix: Soil Lab File ID: \_\_\_\_\_131025A10 Sample wt/vol: 3.61 (g/mL) 9 Date Received: \_\_\_\_10/23/2018 % Solids: 70.5 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column: ID: (mm) Extract Volume: Extract Concentrated. (Y/N)\_\_\_\_\_ (uL) Extraction Type: <u>PT</u> Soil Aliquot (VOA): \_\_\_\_\_ (uL) Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Purge Volume: <u>5.0</u> (mL) Cleanup Factor: Cleanup Types:\_\_\_\_\_ ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	9.8	U
10061-01-5	cis-1,3-Dichloropropene	9.8	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	9.8	U
10061-02-6	trans-1,3-Dichloropropene	9.8	U
79-00-5	1,1,2-Trichloroethane	9.8	U
127-18-4	Tetrachloroethene	9.8	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	9.8	U
106-93-4	1,2-Dibromoethane	9.8	U
108-90-7	Chlorobenzene	9.8	U
100-41-4	Ethylbenzene	9.8	U
179601-23-1	m, p-Xylene	9.8	U
95-47-6	o-Xylene	9.8	U
100-42-5	Styrene	9.8	U
75-25-2	Bromoform	9.8	U
98-82-8	Isopropylbenzene	9.8	U
79-34-5	1,1,2,2-Tetrachloroethane	9.8	U
541-73-1	1,3-Dichlorobenzene	9.8	U
106-46-7	1,4-Dichlorobenzene	9.8	U
95-50-1	1,2-Dichlorobenzene	9.8	U
96-12-8	1,2-Dibromo-3-chloropropane	9.8	U
120-82-1	1,2,4-Trichlorobenzene	9.8	U
87-61-6	1,2,3-Trichlorobenzene	9.8	U

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Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035

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ESNP7

Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ES	NP2
Analytical Metho	d: VOA	Level: LOW		
Matrix: Soil		Lab Sample ID:	TJ23060-006	-
Sample wt/vol:	3.61 (g/mL) g	Lab File ID:		
% Solids: 70.5		Date Received:	10/23/2018	
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extracted:		
Extract Concentr	ated: (Y/N)	Date Analyzed:	10/25/2018	
Soil Aliquot (VO	A): (uL)	Extract Volume:		(uL
Heated Purge: (Y	/N) Y	Extraction Type:	PT	
Purge Volume: 5	5.0 (mL)	Injection Volume	•	
Cleanup Types:		pH: Dilut	ion Factor: <u>1.0</u>	
Concentration Un	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Factor:_		
CAS NUMBER	COMPOUND NAME	R	T EST. CONC.	Q
1	Unknown-01	13.	54 24	JB
2	Unknown-02		71 56	
3	Unknown-03	15.	90 27	JB
4				
56		······································		
7				
8				
9				
0				
1				
2				
3				
5				·
6				
7		·		
8				
9				
0				
1				
2[3	<u> </u>			l
4				
5				
6				
7				
8				
9				
0				

<sup>2</sup>EPA-designated Registry Number.

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP7RE

Contract: EP-W-14035	
MA No.: SDG No	.:ESNP2
Level: LOW	
Lab Sample ID: <b>TJ23060-00</b>	6
Lab File ID:131029A08	<u>.</u>
Date Received: 10/23/2018	
m) Date Extracted:	
m) Date Analyzed: 10/29/2018	*****
Extract Volume:	(uL)
L) Extraction Type: PT	
Injection Volume:	(uL)
L) pH: Dilution Fact	or: <u>1.0</u>
Cleanup Factor:	441-010-014-01-01-01-01-01-01-01-01-01-01-01-01-01-
): ug/kg	
n n n	MA No.: SDG No Level: LOW Lab Sample ID: TJ23060-00 Lab File ID: 131029A08 Date Received: 10/23/2018 mm) Date Extracted: mm) Date Extracted: mm) Date Analyzed: 10/29/2018 Extract Volume: LL) Extraction Type: PT Injection Volume: mL) pH: Dilution Fact Cleanup Factor:

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	8.6	U
74-87-3	Chloromethane	8.6	U
75-01-4	Vinyl chloride	8.6	U
74-83-9	Bromomethane	8.6	U
75-00-3	Chloroethane	8.6	U
75-69-4	Trichlorofluoromethane	8.6	U
75-35-4	1,1-Dichloroethene	8.6	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	8.6	U
67-64-1	Acetone	14	J
75-15-0	Carbon disulfide	. 8.6	U
79-20-9	Methyl acetate	8.6	U
75-09-2	Methylene chloride	8.6	U
156-60-5	trans-1,2-Dichloroethene	8.6	U
1634-04-4	Methyl tert-butyl ether	8.6	U
75-34-3	1,1-Dichloroethane	8.6	U
156-59-2	cis-1,2-Dichloroethene	8.6	U
78-93-3	2-Butanone	17	U
74-97-5	Bromochloromethane	8.6	U
67-66-3	Chloroform	8.6	U
71-55-6	1,1,1-Trichloroethane	8.6	U
110-82-7	Cyclohexane	8.6	υ
56-23-5	Carbon tetrachloride	8.6	U
71-43-2	Benzene	8.6	U
107-06-2	1,2-Dichloroethane	8.6	U
79-01-6	Trichloroethene	8.6	U
108-87-2	Methylcyclohexane	2.4	J
78-87-5	1,2-Dichloropropane	8.6	U

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ESNP2 Lab Code: EQI Case No.: 47927 30 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-006 Sample wt/vol: \_\_\_\_\_4.12 \_\_\_(g/mL) \_\_\_\_ Lab File ID: \_\_\_\_\_ 131029A08 % Solids: 70.5 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/29/2018 Extract Volume: Extract Concentrated: (Y/N) \_\_\_\_\_(uL) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: 5.0 \_\_\_\_\_(mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	8.6	U
10061-01-5	cis-1,3-Dichloropropene	8.6	U
108-10-1	4-Methyl-2-pentanone	17	U
108-88-3	Toluene	8.6	U
10061-02-6	trans-1,3-Dichloropropene	8.6	U
79-00-5	1,1,2-Trichloroethane	8.6	U
127-18-4	Tetrachloroethene	8.6	U
591-78-6	2-Hexanone	17	U
124-48-1	Dibromochloromethane	8.6	U
106-93-4	1,2-Dibromoethane	8.6	U
108-90-7	Chlorobenzene	8.6	U
100-41-4	Ethylbenzene	8.6	U
179601-23-1	m, p-Xylene	8.6	U
95-47-6	o-Xylene	8.6	U
100-42-5	Styrene	8.6	U
75-25-2	Bromoform	8.6	U
98-82-8	Isopropylbenzene	8.6	U
79-34-5	1,1,2,2-Tetrachloroethane	8.6	U
541-73-1	1,3-Dichlorobenzene	8.6	U
106-46-7	1,4-Dichlorobenzene	8.6	U
95-50-1	1,2-Dichlorobenzene	8.6	U
96-12-8	1,2-Dibromo-3-chloropropane	8.6	U
120-82-1	1,2,4-Trichlorobenzene	8.6	U
87-61-6	1,2,3-Trichlorobenzene	8.6	U

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EPA SAMPLE NO.

ESNP7RE

EPA SAMPLE NO.

ESNP7RE

Lab Name: Shealy Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Method: VOA	Level:			
Matrix: Soil	Lab Sample		060-006	
Sample wt/vol: 4.12 (g/mL) g	Lab File II	1310	29A08	
% Solids: 70.5	Date Receiv	ved: 10/2	3/2018	
GC Column: DB-624 ID: 0.25 (mm)	Date Extra	cted:		
Extract Concentrated: (Y/N)	Date Analy:	zed: 10/2	9/2018	
Soil Aliquot (VOA): (uL)				(uL)
Heated Purge: (Y/N) Y	Extraction			
Purge Volume: (mL)	Injection N			
Cleanup Types:			Factor: <u>1.0</u>	
Concentration Units (ug/L, ug/Kg): ug/kg	Cleanup Fac			
CAS NUMBER COMPOUND NAME		RT	EST. CONC.	Q
Unknown-01		13.54	1	JB
Unknown-02		14.71		JB
3 Unknown-03		15.90	48	JB
4 5				
6				
7				
8				
9				
0				
1				
2				
3				
4				
5				
7				
8				
9				
0				
1				
2				
3				
4				
5				
6				
8				
9				
0				
E966796 <sup>2</sup> Total Alkanes		N/A		

<sup>2</sup>EPA-designated Registry Number.

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP8

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 3.61 (g/mL)	Lab File ID: 131029A11
% Solids:	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed: 10/29/2018
Extract Concentrated: (Y/N)	Extract Volume:(uL)
Soil Aliquot (VOA): (uL)	Extraction Type: PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	9.9	U
74-87-3	Chloromethane	9.9	U
75-01-4	Vinyl chloride	9.9	U
74-83-9	Bromomethane	9.9	U
75-00-3	Chloroethane	9.9	U
75-69-4	Trichlorofluoromethane	9.9	U
75-35-4	1,1-Dichloroethene	9.9	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	9.9	U
67-64-1	Acetone	20	U
75-15-0	Carbon disulfide	9.9	U
79-20-9	Methyl acetate	9.9	U
75-09-2	Methylene chloride	9.9	U
156-60-5	trans-1,2-Dichloroethene	9.9	U
1634-04-4	Methyl tert-butyl ether	9.9	U
75-34-3	1,1-Dichloroethane	9.9	U
156-59-2	cis-1,2-Dichloroethene	9.9	U
78-93-3	2-Butanone	20	U
74-97-5	Bromochloromethane	9.9	U
67-66-3	Chloroform	9.9	U
71-55-6	1,1,1-Trichloroethane	9.9	U
110-82-7	Cyclohexane	9.9	U
56-23-5	Carbon tetrachloride	9.9	U
71-43-2	Benzene	9.9	U
107-06-2	1,2-Dichloroethane	9.9	U
79-01-6	Trichloroethene	9.9	U
108-87-2	Methylcyclohexane	9.9	U
78-87-5	1,2-Dichloropropane	9.9	U

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## EPA SAMPLE NO. ESNP8

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: ESNP2 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-015 3.61 (g/mL) g Sample wt/vol: Lab File ID: \_\_\_\_\_ 131029A11 % Solids: 70.2 Date Received: 10/24/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID: \_\_\_\_\_ (mm) Date Analyzed: 10/29/2018 Extract Concentrated: (Y/N) Extract Volume: \_\_\_\_\_(uL) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: <u>PT</u> Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: <u>5.0</u> \_\_\_ (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	9.9	U
10061-01-5	cis-1,3-Dichloropropene	9.9	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	9.9	U
10061-02-6	trans-1,3-Dichloropropene	9.9	U
79-00-5	1,1,2-Trichloroethane	9.9	U
127-18-4	Tetrachloroethene	9.9	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	9.9	U
106-93-4	1,2-Dibromoethane	9.9	U
108-90-7	Chlorobenzene	9.9	U
100-41-4	Ethylbenzene	9.9	U
179601-23-1	m, p-Xylene	9.9	U
95-47-6	o-Xylene	9.9	U
100-42-5	Styrene	9.9	U
75-25-2	Bromoform	9.9	U
98-82-8	Isopropylbenzene	9.9	U
79-34-5	1,1,2,2-Tetrachloroethane	9.9	U
541-73-1	1,3-Dichlorobenzene	9.9	U
106-46-7	1,4-Dichlorobenzene	9.9	U
95-50-1	1,2-Dichlorobenzene	9.9	U
96-12-8	1,2-Dibromo-3-chloropropane	9.9	U
120-82-1	1,2,4-Trichlorobenzene	9.9	U
87-61-6	1,2,3-Trichlorobenzene	9.9	U

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EPA SAMPLE NO.

ESNP8

Lab Name: Shealy Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Method: VOA	Level:	LOW	,	
Matrix: Soil	Lab Sample	ID:	060-015	
Sample wt/vol: 3.61 (g/mL) g	Lab File II			
% Solids: 70.2	Date Receiv	ved: 10/2	4/2018	
GC Column: DB-624 ID: 0.25 (mm)	Date Extra	cted:		
Extract Concentrated: (Y/N)	Date Analy:	zed: <u>10/2</u>	9/2018	
Soil Aliquot (VOA): (uL)	Extract Vo	lume:		(uL
Heated Purge: (Y/N) Y	Extraction	Type: PT	• • • • • • • • • • • • • • • • • • • •	~
Purge Volume: 5.0 (mL)	Injection N	/olume:		
Cleanup Types:	pH:	Dilution	Factor: <u>1.0</u>	
Concentration Units (ug/L, ug/Kg): ug/kg				
CAS NUMBER COMPOUND NAME		RT	EST. CONC.	Q
556-67-2 Cyclotetrasiloxane, octamethyl	- C. C.	12.19	9.9	NJBL
106-68-3 3-Octanone		12.66		NJ
Unknown-01		13.54	1	JB
Unknown-02		14.71	30	JB
L				
	······			
E966796 <sup>2</sup> Total Alkanes		N/A	1	

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-015 Sample wt/vol: \_\_\_\_\_\_3.6 \_\_\_(g/mL) \_\_\_\_ Lab File ID: 131031A09 % Solids: 70.2 Date Received: 10/24/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/31/2018 Extract Volume: \_\_\_\_\_(uL) Extract Concentrated: (Y/N) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	9.9	U
74-87-3	Chloromethane	9.9	U
75-01-4	Vinyl chloride	9.9	U
74-83-9	Bromomethane	9.9	U
75-00-3	Chloroethane	9.9	U
75-69-4	Trichlorofluoromethane	9.9	U
75-35-4	1,1-Dichloroethene	9.9	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	9.9	U
67-64-1	Acetone	9.0	J
75-15-0	Carbon disulfide	9.9	U
79 20 9	Methyl acetate	9.9	U
75-09-2	Methylene chloride	9.9	U
156-60-5	trans-1,2-Dichloroethene	9.9	U
1634-04-4	Methyl tert-butyl ether	9.9	U
75-34-3	1,1-Dichloroethane	9.9	U
156-59-2	cis-1,2-Dichloroethene	9.9	U
78-93-3	2-Butanone	20	U
74-97-5	Bromochloromethane	9.9	U
67-66-3	Chloroform	9.9	U
71-55-6	1,1,1-Trichloroethane	6.6	J
110-82-7	Cyclohexane	9.9	U
56-23-5	Carbon tetrachloride	9.9	U
71-43-2	Benzene	9.9	U
107-06-2	1,2-Dichloroethane	9.9	U
79-01-6	Trichloroethene	9.9	U
108-87-2	Methylcyclohexane	9.9	U
78-87-5	1,2-Dichloropropane	9.9	U

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EPA SAMPLE NO.

ESNP8RE

ESNP8RE

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Lab Code: EQI Case No.: 47927 Analytical Method: VOA Matrix: Soil Sample wt/vol: 3.6 (g/mL) 9 % Solids: 70.2 GC Column: DB-624 ID: 0.25 (mm) GC Column: ID: (mm) Extract Concentrated: (Y/N) Soil Aliquot (VOA): (uL) Heated Purge: (Y/N) Y Purge Volume: 5.0 (mL) Cleanup Types: (ug/L, mg/L, ug/Kg):

Contract: EP-W-14035		
MA No.: SDG No.:SNP2		
Level: LOW		
Lab Sample ID:		
Lab File ID:		
Date Received: 10/24/2018		
Date Extracted:		
Date Analyzed: 10/31/2018		
Extract Volume:	( 11T, )	
Extraction Type: PT		
Injection Volume:	(uL)	
pH: Dilution Factor: 1.0		
Cleanup Factor:		
ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	9.9	U
10061-01-5	cis-1,3-Dichloropropene	9.9	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	9.9	U
10061-02-6	trans-1,3-Dichloropropene	9.9	U
79-00-5	1,1,2-Trichloroethane	9.9	U
127-18-4	Tetrachloroethene	9.9	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	9.9	U
106-93-4	1,2-Dibromoethane	9.9	U
108-90-7	Chlorobenzene	9.9	U
100-41-4	Ethylbenzene	9.9	U
179601-23-1	m, p-Xylene	9.9	U
95-47-6	o-Xylene	9.9	U
100-42-5	Styrene	9.9	U
75-25-2	Bromoform	9.9	U
98-82-8	Isopropylbenzene	9.9	U
79-34-5	1,1,2,2-Tetrachloroethane	9.9	U
541-73-1	1,3-Dichlorobenzene	9.9	U
106-46-7	1,4-Dichlorobenzene	9.9	U
95-50-1	1,2-Dichlorobenzene	9.9	U
96-12-8	1,2-Dibromo-3-chloropropane	9.9	U
120-82-1	1,2,4-Trichlorobenzene	9.9	U
87-61-6	1,2,3-Trichlorobenzene	9.9	U

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Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035

EPA SAMPLE NO.

ESNP8RE

Case No.: 47927	MA No.: S	DG No.: ESN	22	
Analytical Method: VOA				
3.6 (g/mL) g				
· · ·	Date Received: 10/2	24/2018		
4 ID: 0.25 (mm)	Date Extracted:			
ated: (Y/N)	Date Analyzed: 10/3	31/2018		
A): (uL)	Extract Volume: Extraction Type: PT			
5.0 (mL)	Injection Volume:			
	pH: Dilution	Factor: <u>1.0</u>		
its (ug/L, ug/Kg):				
1			Q	
			NJ	
Unknown-01		1	JB	
Unknown-02			J	
-				
			41 - y <sup>1</sup>	
	· · · · · · · · · · · · · · · · · · ·		*****	
-				
	·			
	······································			
	d: _VOA 3.6 (g/mL) g 4 ID: 0.25 (mm) ated: (Y/N) A): (uL) /N) Y 5.0 (mL) its (ug/L, ug/Kg): _ug/kg COMPOUND NAME 3-Octanone Unknown-01	d: VOA       Level: LOW         3.6 (g/mL) g       Lab Sample ID: TJ2:         3.6 (g/mL) g       Lab File ID: 1310         Date Received: 10/2       Date Received: 10/2         4 ID: 0.25 (mm)       Date Extracted:         ated: (Y/N)       Date Analyzed: 10/3         A):       (uL)         /N) Y       Extract Volume:         5.0       (mL)         its (ug/L, ug/Kg):       ug/kg         COMPOUND NAME       RT         3-Octanone       12.66         Unknown-01       13.54	d: VOA       Level: LOW	

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP9

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: VOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:5.02 (g/mL)	Lab File ID: 131029A12
% Solids: 77.6	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed:10/29/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type:PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	6.4	U
74-87-3	Chloromethane	6.4	U
75-01-4	Vinyl chloride	6.4	U
74-83-9	Bromomethane	6.4	U
75-00-3	Chloroethane	6.4	U
75-69-4	Trichlorofluoromethane	6.4	U
75-35-4	1,1-Dichloroethene	6.4	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	6.4	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.4	U
79-20-9	Methyl acetate	6.4	U
75-09-2	Methylene chloride	6.4	U
156-60-5	trans-1,2-Dichloroethene	6.4	U
1634-04-4	Methyl tert-butyl ether	6.4	U
75-34-3	1,1-Dichloroethane	6.4	U
156-59-2	cis-1,2-Dichloroethene	6.4	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.4	U
67-66-3	Chloroform	6.4	U
71-55-6	1,1,1-Trichloroethane	6.4	U
110-82-7	Cyclohexane	6.4	U
56-23-5	Carbon tetrachloride	6.4	U
71-43-2	Benzene	6.4	U
107-06-2	1,2-Dichloroethane	6.4	U
79-01-6	Trichloroethene	6.4	U
108-87-2	Methylcyclohexane	6.4	U
78-87-5	1,2-Dichloropropane	6.4	U

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP9

Lab Name: Shealy Environmental Services, Inc.	Contract: <u>EP-W-14035</u>
Lab Code: EQI Case No.: 47927	
Analytical Method: VOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:5.02 (g/mL)	
% Solids: 77.6	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed: 10/29/2018
Extract Concontrated: (Y/N)	Extract Volume:(uL)
Soil Aliquot (VOA): (uL)	Extraction Type:PT
Heated Purge: (Y/N) Y	Injection Volume:(uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	6.4	U
10061-01-5	cis-1,3-Dichloropropene	6.4	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.4	U
10061-02-6	trans-1,3-Dichloropropene	6.4	U
79-00-5	1,1,2-Trichloroethane	6.4	U
127-18-4	Tetrachloroethene	6.4	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.4	U
106-93-4	1,2-Dibromoethane	6.4	U
108-90-7	Chlorobenzene	6.4	U
100-41-4	Ethylbenzene	6.4	U
179601-23-1	m, p-Xylene	6.4	U
95-47-6	o-Xylene	6.4	U
100-42-5	Styrene	6.4	U
75-25-2	Bromoform	6.4	U
98-82-8	Isopropylbenzene	6.4	U
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U
541-73-1	1,3-Dichlorobenzene	6.4	U
106-46-7	1,4-Dichlorobenzene	6.4	U
95-50-1	1,2-Dichlorobenzene	6.4	U
96-12-8	1,2-Dibromo-3-chloropropane	6.4	U
120-82-1	1,2,4-Trichlorobenzene	6.4	U
87-61-6	1,2,3-Trichlorobenzene	6.4	U

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ESNP9

Lab Name: Shealy	Environmental Services, Inc.	Contract:	EP-W-1403	5	
Lab Code: EQI	Case No.: 47927	MA No.:	S	DG No.: ESN	IP2
Analytical Metho	Dod: VOA	Level:			
Matrix: Soil		Lab Sample	ID: TJ2	3060-016	
	5.02 (g/mL) g	Lab File I	D: 131	029A12	
		Date Recei	.ved: 10/2	24/2018	
GC Column: DB-62	24 ID: 0.25 (mm)	Date Extra	cted:		
Extract Concent	cated: (Y/N)	Date Analy	zed:10/2	29/2018	
Soil Aliquot (VC	DA): (uL)	Extract Vo	lume:	5 10 10 - A - A - A - A - A - A - A - A - A -	(uL)
Heated Purge: ()	(/N) Y	Extraction Type:PT			
Purge Volume:	5.0 (mL)	Injection	Volume:		
Cleanup Types:		pH:	Dilution	Hactor: 1.0	
Concentration Ur	nits (ug/L, ug/Kg): <u>ug/kg</u>				
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q G
556-67-2	Cyclotetrasiloxane, octamethyl-	و . د.	12.19	7.7	NOBV 12
106-68-3	3-Octanone		12.66		NJ
	Unknown-01		13.54		JB
	Unknown-02		14.71	11	JB
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E966796 <sup>2</sup>	Total Alkanes		N/A		

Form 1B-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

TARGET ANAL	LYTE LIST
Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	Contract: <u>EP-W-14035</u> MA No.: SDG No.: <u>ESNP2</u>
Analytical Method: VOA	Level: LOW
Matrix: Soil	
Sample wt/vol:(g/mL)_9	
% Solids: 77.6	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed:10/31/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q.
75-71-8	Dichlorodifluoromethane	6.7	U
74-87-3	Chloromethane	6.7	U
75-01-4	Vinyl chloride	6.7	U
74-83-9	Bromomethane	6.7	U
75-00-3	Chloroethane	6.7	U
75-69-4	Trichlorofluoromethane	6.7	U
75-35-4	1,1-Dichloroethene	6.7	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	6.7	U
67-64-1	Acetone	3.7	J
75-15-0	Carbon disulfide	6.7	U
79-20-9	Methyl acetate	6.7	U
75-09-2	Methylene chloride	6.7	U
156-60-5	trans-1,2-Dichloroethene	6.7	U
1634-04-4	Methyl tert-butyl ether	6.7	υ
75-34-3	1,1-Dichloroethane	6.7	U
156-59-2	cis-1,2-Dichloroethene	6.7	U
78-93-3	2-Butanone	13	υ
74-97-5	Bromochloromethane	6.7	U
67-66-3	Chloroform	6.7	U
71-55-6	1,1,1-Trichloroethane	6.7	U
110-82-7	Cyclohexane	6.7	U
56-23-5	Carbon tetrachloride	6.7	U
71-43-2	Benzene	6.7	U
107-06-2	1,2-Dichloroethane	6.7	U
79-01-6	Trichloroethene	6.7	U
108-87-2	Methylcyclohexane	6.7	U
78-87-5	1,2-Dichloropropane	6.7	U

Form 1A-OR

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EPA SAMPLE NO.

ESNP9RE

	FORM	1A-C	DR	
ORGANIC	ANALY	SIS	DATA	SHEET
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Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 1-30 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Analytical Method: VOA Level: LOW Matrix: Soil Lab Sample ID: TJ23060-016 Sample wt/vol: \_\_\_\_\_4.81 \_\_\_(g/mL) \_\_\_\_ Lab File ID: \_\_\_\_131031A10 % Solids: 77.6 Date Received: 10/24/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: \_\_\_\_\_10/31/2018 Extract Concentrated: (Y/N) Extract Volume: \_\_\_\_\_(uL) Extraction Type: PT Soil Aliquot (VOA): \_\_\_\_\_ (uL) Injection Volume:\_\_\_\_\_ (uL) Heated Purge: (Y/N) Y Purge Volume: <u>5.0</u> (mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Types:\_\_\_\_\_ Cleanup Factor: Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	6.7	U
10061-01-5	cis-1,3-Dichloropropene	6.7	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Tolúene	6.7	U
10061-02-6	trans-1,3-Dichloropropene	6.7	U
79-00-5	1,1,2-Trichloroethane	6.7	U
127-18-4	Tetrachloroethene	6.7	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.7	U
106-93-4	1,2-Dibromoethane	6.7	U
108-90-7	Chlorobenzene	6.7	U
100-41-4	Ethylbenzene	6.7	U
179601-23-1	m, p-Xylene	6.7	U
95-47-6	o-Xylene	6.7	U
100-42-5	Styrene	6.7	U
75-25-2	Bromoform	6.7	U
98-82-8	Isopropylbenzene	6.7	U
79-34-5	1,1,2,2-Tetrachloroethane	6.7	υ
541-73-1	1,3-Dichlorobenzene	6.7	U
106-46-7	1,4-Dichlorobenzene	6.7	U
95-50-1	1,2-Dichlorobenzene	6.7	U
96-12-8	1,2-Dibromo-3-chloropropane	6.7	U
120-82-1	1,2,4-Trichlorobenzene	6.7	U
87-61-6	1,2,3-Trichlorobenzene	6.7	U

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EPA SAMPLE NO. ESNP9RE

EPA SAMPLE NO.

ESNP9RE

Lab Name: Shealy Er	nvironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Method		Level:			
Matrix: Soil		Lab Sample		060-016	
Sample wt/vol:	4.81 (g/mL) g	Lab File ID			
% Solids: 77.6		Date Receiv			
GC Column: DB-624	ID: 0.25 (mm)	Date Extrac	ted:		
	ated: (Y/N)	Date Analyz	red: 10/3	1/2018	
	A):(uL)				(uL)
	/N)Y			-	
	(mL)	Injection V	'olume:		
		pH:			
	its (ug/L, ug/Kg):ug/kg	Cleanup Fac			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01 106-68-3	3-Octanone		12.66		NJ
02	Unknown-01		13.54		JB
03	Unknown-02		14.71	8.4	J
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24					
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28					
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A		

<sup>2</sup>EPA-designated Registry Number.

Form 1B-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ0

Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method: VOA	
Matrix: Soil	
Sample wt/vol:4.35(g/mL)_9_	
% Solids:66.1	
GC Column: DB-624 ID: 0.25	( mm )
GC Column: ID:	(mm)
Extract Concentrated: (Y/N)	
Soil Aliquot (VOA):	(uL)
Heated Purge: (Y/N) Y	
Purge Volume: <u>5.0</u>	(mL)
Cleanup Types:	<u>.</u>
Concentration Units (ug/L, mg/L, ug/	′Kg):

Contract: EP-W-14035	
MA No.: SDG No.: _ ESNP2	
Level: LOW	
Lab Sample ID:	
Lab File ID:131025A11	
Date Received: 10/23/2018	
Date Extracted:	
Date Analyzed: <u>10/25/2018</u>	
Extract Volume:	(uT,)
Extraction Type: PT	
Injection Volume:	(uL)
pH: Dilution Factor: 1.0	
Cleanup Factor:	
ua/ka	

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	8.7	U
74-87-3	Chloromethane	8.7	U
75-01-4	Vinyl chloride	8.7	U
74-83-9	Bromomethane	8.7	U
75-00-3	Chloroethane	8.7	U
75-69-4	Trichlorofluoromethane	8.7	U
75-35-4	1,1-Dichloroethene	8.7	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	8.7	U
67-64-1	Acetone	17	U
75-15-0	Carbon disulfide	3.7	J
79-20-9	Methyl acetate	8.7	U ,
75-09-2	Methylene chloride	8.7	U
156-60-5	trans-1,2-Dichloroethene	8.7	U
1634-04-4	Methyl tert-butyl ether	8.7	U
75-34-3	1,1-Dichloroethane	8.7	U
156-59-2	cis-1,2-Dichloroethene	8.7	U
78-93-3	2-Butanone	17	U
74-97-5	Bromochloromethane	8.7	U
67-66-3	Chloroform	8.7	U
71-55-6	1,1,1-Trichloroethane	8.7	U
110-82-7	Cyclohexane	8.7	U
56-23-5	Carbon tetrachloride	8.7	U
71-43-2	Benzene	8.7	U
107-06-2	1,2-Dichloroethane	8.7	U
79-01-6	Trichloroethene	8.7	U
108-87-2	Methylcyclohexane	8.7	U
78-87-5	1,2-Dichloropropane	8.7	U

Form 1A-OR

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## EPA SAMPLE NO. ESNQO

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: VOA Lab Sample ID: \_ TJ23060-007 Matrix: Soil Sample wt/vol: \_\_\_\_\_4.35 (g/mL) \_\_\_\_ Lab File ID: \_\_\_\_\_\_ 131025A11 % Solids: 66.1 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_ (mm) Date Analyzed: 10/25/2018 Extract Volume: \_\_\_\_\_ (uL) Extract Concontrated: (Y/N)\_\_\_\_\_ Extraction Type: PT Soil Aliquot (VOA): \_\_\_\_\_(uL) Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Purge Volume: 5.0 (mL) Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	8.7	U
10061-01-5	cis-1,3-Dichloropropene	8.7	U
108-10-1	4-Methyl-2-pentanone	17	U
108-88-3	Toluene	8.7	U
10061-02-6	trans-1,3-Dichloropropene	8.7	U
79-00-5	1,1,2-Trichloroethane	8.7	U
127-18-4	Tetrachloroethene	8.7	U
591-78-6	2-Hexanone	23	В
124-48-1	Dibromochloromethane	8.7	U
106-93-4	1,2-Dibromoethane	8.7	U
108-90-7	Chlorobenzene	8.7	U
100-41-4	Ethylbenzene	8.7	U
179601-23-1	m, p-Xylene	8.7	U
95-47-6	o-Xylene	8.7	U
100-42-5	Styrene	8.7	U
75-25-2	Bromoform	8.7	U
98-82-8	Isopropylbenzene	8.7	U
79-34-5	1,1,2,2-Tetrachloroethane	8.7	U
541-73-1	1,3-Dichlorobenzene	8.7	U
106-46-7	1,4-Dichlorobenzene	8.7	U
95-50-1	1,2-Dichlorobenzene	8.7	U
96-12-8	1,2-Dibromo-3-chloropropane	8.7	U
120-82-1	1,2,4-Trichlorobenzene	8.7	U
87-61-6	1,2,3-Trichlorobenzene	8.7	U

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EPA SAMPLE NO.

ESNQ0

Lab Name: Shealy Environmental Services, Inc.	Contract:EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method: VOA	
Matrix: Soil	Lab Sample ID: TJ23060-007
Sample wt/vol: (g/mL) g	
% Solids: 66.1	Date Received: 10/23/2018
GC Column: DB-624 ID: 0.25 (r	) Date Extracted:
Extract Concentrated: (Y/N)	Date Analyzed: 10/25/2018
Soil Aliquot (VOA): (u	) Extract Volume:(u
Heated Purge: (Y/N) Y	_ Extraction Type: PT
Purge Volume: 5.0 (m	Injection Volume:
Cleanup Types:	pH: Dilution Factor: <u>1.0</u>
Concentration Units (ug/L, ug/Kg): ug/	
CAS NUMBER COMPOUND	
Unknown-01	13.54
2 Unknown-02	14.71 43 JB
Unknown-03	15.90 16 JB
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EPA-designated Registry Number.

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-007 Sample wt/vol: \_\_\_\_\_4.08 \_\_\_(g/mL) \_\_\_\_ Lab File ID: \_\_\_\_\_131029A09 % Solids: 66.1 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/29/2018 Extract Volume: (uL) Extract Concentrated: (Y/N) Soil Aliquot (VOA):\_\_\_\_\_ (uL) Extraction Type: PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) Purge Volume: 5.0 pH: \_\_\_\_\_ Dilution Factor: 1.0 \_\_\_\_\_(mL) Cleanup Types:\_\_\_\_\_ Cleanup Factor: Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	9.3	U
74-87-3	Chloromethane	9.3	U
75-01-4	Vinyl chloride	9.3	U
74-83-9	Bromomethane	9.3	U
75-00-3	Chloroethane	9.3	U
75-69-4	Trichlorofluoromethane	9.3	U
75-35-4	1,1-Dichloroethene	. 9.3	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	9.3	U
67-64-1	Acetone	19	U
75-15-0	Carbon disulfide	3.1	J
79-20-9	Methyl acetate	9.3	U
75-09-2	Methylene chloride	9.3	U
156-60-5	trans-1,2-Dichloroethene	9.3	U
1634-04-4	Methyl tert-butyl ether	9.3	U
75-34-3	1,1-Dichloroethane	9.3	U
156-59-2	cis-1,2-Dichloroethene	9.3	U
78-93-3	2-Butanone	19	U
74-97-5	Bromochloromethane	9.3	U
67-66-3	Chloroform	9.3	U
71-55-6	1,1,1-Trichloroethane	9.3	U
110-82-7	Cyclohexane	9.3	U
56-23-5	Carbon tetrachloride	9.3	U
71-43-2	Benzene	9.3	U
107-06-2	1,2-Dichloroethane	9.3	U
79-01-6	Trichloroethene	9.3	U
108-87-2	Methylcyclohexane	9.3	U
78-87-5	1,2-Dichloropropane	9.3	U

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EPA SAMPLE NO.

**ESNQORE** 

ESNQORE

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Level: LOW Analytical Method: \_VOA Lab Sample ID: TJ23060-007 Matrix: Soil Sample wt/vol: 4.08 (g/mL) g Lab File ID: \_\_\_\_\_ 131029A09 % Solids: 66.1 Date Received: 10/23/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 10/29/2018 Extract Volume: \_\_\_\_\_(uL) Extract Concentrated: (Y/N) Extraction Type:\_PT\_\_\_\_ Soil Aliquot (VOA): \_\_\_\_\_ (uL) Injection Volume:\_\_\_\_\_(uL) Heated Purge: (Y/N) Y pH: \_\_\_\_\_ Dilution Factor: 1.0 Purge Volume: <u>5.0</u> (mL) Cleanup Types:\_\_\_\_\_ Cleanup Factor: ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	9.3	U
10061-01-5	cis-1,3-Dichloropropene	9.3	U
108-10-1	4-Methyl-2-pentanone	19	U
108-88-3	Toluene	9.3	U
10061-02-6	trans-1,3-Dichloropropene	9.3	U
79-00-5	1,1,2-Trichloroethane	9.3	U
127-18-4	Tetrachloroethene	9.3	U
591-78-6	2-Hexanone	20	
124-48-1	Dibromochloromethane	9.3	U
106-93-4	1,2-Dibromoethane	9.3	U
108-90-7	Chlorobenzene	9.3	U
100-41-4	Ethylbenzene	9.3	U
179601-23-1	m, p-Xylene	9.3	U
95-47-6	o-Xylene	9.3	U
100-42-5	Styrene	9.3	U
75-25-2	Bromoform	9.3	U
98-82-8	Isopropylbenzene	9.3	U
79-34-5	1,1,2,2-Tetrachloroethane	9.3	U
541-73-1	1,3-Dichlorobenzene	9.3	U
106-46-7	1,4-Dichlorobenzene	9.3	U
95-50-1	1,2-Dichlorobenzene	9.3	U
96-12-8	1,2-Dibromo-3-chloropropane	9.3	U
120-82-1	1,2,4-Trichlorobenzene	9.3	U
87-61-6	1,2,3-Trichlorobenzene	9.3	U

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EPA SAMPLE NO.

ESNQ0RE

Lab Name: Shealy E	nvironmental Services, Inc.	Contract: EP-W-1403	5	
Lab Code: EQI	Case No.: 47927	MA No.: S	DG No.: ESI	NP2
Analytical Metho	d: VOA	Level: LOW		
Matrix: Soil		Lab Sample ID: TJ2	3060-007	
Sample wt/vol:	4.08 (g/mL) g	Lab File ID: 131		
% Solids: 66.1	(9/112)	Date Received: 10/		
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extracted:		
	ated: (Y/N)	Date Analyzed: 10/		
	A): (uL)	Extract Volume:		(uL)
	/N) Y	Extraction Type:	Т	
Purge Volume:	5.0 (mL)	Injection Volume:		
		pH: Dilution		
Concentration Un	its (ug/L, ug/Kg):	Cleanup Factor:		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	0
01	Unknown-01	13.54		JB
02	Unknown-02	14.71	1	1
03	Unknown-03	15.90		
04				
05				
06	-			
07				
08				
09				
11				
12		· · ·		
13				
14				
15				
16				
17				
18				
19 20			+	
21				
22				
23			++	
24				
25				
26				
27				
28			<u> </u>	
29				

<sup>2</sup>EPA-designated Registry Number.

Total Alkanes

30

E966796<sup>2</sup>

Form 1B-OR

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N/A

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ1

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2		
Analytical Method: VOA	Level:LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:4.16(g/mL)9	Lab File ID:131029A13		
% Solids: 81.1	Date Received: <u>10/24/2018</u>		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed:10/29/2018		
Extract Concentrated: (Y/N)	Extract Volume:(uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: PT		
Heated Purge: (Y/N) Y	Injection Volume: (uL)		
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	7.4	U
74-87-3	Chloromethane	7.4	U
75-01-4	Vinyl chloride	7.4	U
74-83-9	Bromomethane	7.4	U
75-00-3	Chloroethane	7.4	U
75-69-4	Trichlorofluoromethane	7.4	U
75-35-4	1,1-Dichloroethene	7.4	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	7.4	U
67-64-1	Acetone	15	U
75-15-0	Carbon disulfide	7.4	U
79-20-9	Methyl acetate	7.4	U
75-09-2	Methylene chloride	7.4	U
156-60-5	trans-1,2-Dichloroethene	7.4	U
1634-04-4	Methyl tert-butyl ether	7.4	U
75-34-3	1,1-Dichloroethane	7.4	U
156-59-2	cis-1,2-Dichloroethene	7.4	U
78-93-3	2-Butanone	15	U
74-97-5	Bromochloromethane	7.4	U
67-66-3	Chloroform	7.4	U
71-55-6	1,1,1-Trichloroethane	7.4	U
110-82-7	Cyclohexane	7.4	U
56-23-5	Carbon tetrachloride	7.4	U
71-43-2	Benzene	7.4	U
107-06-2	1,2-Dichloroethane	7.4	U
79-01-6	Trichloroethene	7.4	U
108-87-2	Methylcyclohexane	7.4	U
78-87-5	1,2-Dichloropropane	7.4	U

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ1

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: VOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol: (g/mL)	Lab File ID:131029A13		
% Solids: 81.1	Date Received: 10/24/2018		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed: 10/29/2018		
Extract Concentrated: (Y/N)	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: PT		
Heated Purge: (Y/N) Y	Injection Volume: (uL)		
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	7.4	U
10061-01-5	cis-1,3-Dichloropropene	7.4	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	7.4	U
10061-02-6	trans-1,3-Dichloropropene	7.4	U
79-00-5	1,1,2-Trichloroethane	7.4	U
127-18-4	Tetrachloroethene	7.4	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	7.4	U
106-93-4	1,2-Dibromoethane	7.4	U
108-90-7	Chlorobenzene	7.4	U
100-41-4	Ethylbenzene	7.4	U
179601-23-1	m, p-Xylene	7.4	U
95-47-6	o-Xylene	7.4	U
100-42-5	Styrene	7.4	U
75-25-2	Bromoform	7.4	U
98-82-8	Isopropylbenzene	7.4	U
79-34-5	1,1,2,2-Tetrachloroethane	7.4	U
541-73-1	1,3-Dichlorobenzene	7.4	U
106-46-7	1,4-Dichlorobenzene	7.4	U
95-50-1	1,2-Dichlorobenzene	7.4	U
96-12-8	1,2-Dibromo-3-chloropropane	7.4	U
120-82-1	1,2,4-Trichlorobenzene	7.4	U
87-61-6	1,2,3-Trichlorobenzene	7.4	U

Form 1A-OR

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EPA SAMPLE NO.

ESNQ1

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:_	EP-W-14035	5	
Lab Code: EQI	Case No.: 47927	MA No.:	S	DG No.: ESN	P2
Analytical Metho	d: VOA	Level: LOW			
Matrix: Soil		Lab Sample	ID: TJ23	3060-018	
Sample wt/vol:	4.16 (g/mL) g	Lab File I			
% Solids: 81.1		Date Recei	.ved: 10/2	24/2018	
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extra	cted:		
Extract Concentr	ated: (Y/N)	Date Analy	zed: 10/2	29/2018	
Soil Aliquot (VO	A):(uL)				(uL)
	/N) Y			Г	
Purge Volume:	5.0 (mL)	Injection	Volume:		
				Factor: <u>1.0</u>	
Concentration Un	its (ug/L, ug/Kg): <u>ug/kg</u>	<u></u>			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
556-67-2	Cyclotetrasiloxane, octamethyl-	C.C.	12.19	32	NJBUI
	Unknown-01		13.54	1	JB
	Unknown-02		14.71		JB
	Unknown-03		15.89	18	J
					-
		WA. U	1		
0.7 <sup>22</sup>					
	· · · · · · · · · · · · · · · · · · ·				
•					
E966796 <sup>2</sup>	Total Alkanes	5400 5 a 22 annual	N/A		

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Form 1B-OR

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO. ESNQ1RE

TARGET ANA	LYTE LIST	لم
Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035	F.
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: STG3	0-10
Analytical Method: VOA	Level:LOW	
Matrix: Soil	Lab Sample ID: TJ23060-018	
Sample wt/vol:(g/mL)		
% Solids:81.1	Date Received: 10/24/2018	
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:	
GC Column: ID: (mm)	Date Analyzed:10/31/2018	
Extract Concentrated: (Y/N)	Extract Volume:(uL)	
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>	
Heated Purge: (Y/N) Y	Injection Volume: (uL)	
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0	
Cleanup Types:	Cleanup Factor:	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	7.2	U
74-87-3	Chloromethane	7.2	U
75-01-4	Vinyl chloride	7.2	U
74-83-9	Bromomethane	7.2	Ū
75-00-3	Chloroethane	7.2	U
75-69-4	Trichlorofluoromethane	7.2	U
75-35-4	1,1-Dichloroethene	7.2	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	7.2	U
67-64-1	Acetone	14	U
75-15-0	Carbon disulfide	7.2	U
79-20-9	Methyl acetate	7.2	U
75-09-2	Methylene chloride	7.2	U
156-60-5	trans-1,2-Dichloroethene	7.2	U
1634-04-4	Methyl tert-butyl ether	7.2	U
75-34-3	1,1-Dichloroethane	7.2	U
156-59-2	cis-1,2-Dichloroethene	7.2	U
78-93-3	2-Butanone	14	IJ
74-97-5	Bromochloromethane	7.2	U
67-66-3	Chloroform	7.2	U
71-55-6	1,1,1-Trichloroethane	4.3	J
110-82-7	Cyclohexane	- 7.2	U
56-23-5	Carbon tetrachloride	7.2	U
71-43-2	Benzene	7.2	U
107-06-2	1,2-Dichloroethane	7.2	U
79-01-6	Trichloroethene	7.2	U
108-87-2	Methylcyclohexane	5.8	J
78-87-5	1,2-Dichloropropane	7.2	U

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ1RE

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 4.27 (g/mL)	Lab File ID:
% Solids: 81.1	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed:10/31/2018
Extract Concentrated: (Y/N)	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	7.2	U
10061-01-5	cis-1,3-Dichloropropene	7.2	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	7.2	U
10061-02-6	trans-1,3-Dichloropropene	7.2	U
79-00-5	1,1,2-Trichloroethane	7.2	U
127-18-4	Tetrachloroethene	7.2	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	7.2	U
106-93-4	1,2-Dibromoethane	7.2	U
108-90-7	Chlorobenzene	7.2	U
100-41-4	Ethylbenzene	7.2	U
179601-23-1	m, p-Xylene	7.2	U
95-47-6	o-Xylene	7.2	U
100-42-5	Styrene	7.2	U
75-25-2	Bromoform	7.2	U
98-82-8	Isopropylbenzene	7.2	U
79-34-5	1,1,2,2-Tetrachloroethane	7.2	U
541-73-1	1,3-Dichlorobenzene	7.2	U
106-46-7	1,4-Dichlorobenzene	7.2	U
95-50-1	1,2-Dichlorobenzene	7.2	U
96-12-8	1,2-Dibromo-3-chloropropane	7.2	U
120-82-1	1,2,4-Trichlorobenzene	7.2	U
87-61-6	1,2,3-Trichlorobenzene	7.2	U

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EPA SAMPLE NO.

ESNQ1RE

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:_	EP-W-14035	5	
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.: _ESNP2			P2
Analytical Metho	d: VOA	Level: LOW			
Matrix: Soil		Lab Sample		3060-018	
Sample wt/vol:	4.27 (g/mL) g				
% Solids: 81.1		Date Recei			
	4 ID: 0.25 (mm)		Provide and the second s		
	ated: (Y/N)		the second s		
	A):(uL)				(11]) ·
	/N) Y			• • • • • • • • • • • • • • • • • • •	
Purge Volume:	5.0 (mL)				
				Factor: <u>1.0</u>	
Concentration Un	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fa	ctor:	•	
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q JE U 12-
1 556-67-2	Unknown-01 Cydotetras	loxane oct	12.19	U.C. 31	JE 0 12
2 127-91-3	.betaPinene	3	12.46	22	NJ
3	Unknown-02		13.24	14	J
13466-78-9	3-Carene		13.40	24	NJ
	Unknown-03		13.54	89	JB
<u> </u>	Unknown-04		14.71		J
	Unknown-05		15.89	21	J
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	-				
3					
5					
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8					
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70667062					
E966796 <sup>2</sup>	Total Alkanes		N/A		
EPA-designated Re	egistry Number. C.C. >	connow la	noratory	contami	nant
	Form 1	R-OP	$\sim$		1/201C)
	Form 1	D-UK		SOM02.4 (10	-
	HRS Page N	lumber 171		307 0	of 2916
	into i ugo n				

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: VOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: (g/mL)	Lab File ID: 131029A14
% Solids: 82.9	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed:10/29/2018
Extract Concentrated: (Y/N)	Extract Volumo: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	7.2	U
74-87-3	Chloromethane	7.2	U
75-01-4	Vinyl chloride	7.2	U
74-83-9	Bromomethane	7.2	U
75-00-3	Chloroethane	7.2	υ
75-69-4	Trichlorofluoromethane	7.2	U
75-35-4	1,1-Dichloroethene	7.2	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	7.2	U
67-64-1	Acetone	5.5	J
75-15-0	Carbon disulfide	7.2	U
79-20-9	Methyl acetate	7.2	U
75-09-2	Methylene chloride	7.2	U
156-60-5	trans-1,2-Dichloroethene	7.2	U
1634-04-4	Methyl tert-butyl ether	7.2	U
75-34-3	1,1-Dichloroethane	7.2	U
156-59-2	cis-1,2-Dichloroethene	7.2	U
78-93-3	2-Butanone	14	U
74-97-5	Bromochloromethane	7.2	U
67-66-3	Chloroform	7.2	U
71-55-6	1,1,1-Trichloroethane	7.2	U
110-82-7	Cyclohexane	7.2	U
56-23-5	Carbon tetrachloride	7.2	U
71-43-2	Benzene	11	
107-06-2	1,2-Dichloroethane	7.2	U
79-01-6	Trichloroethene	7.2	U
108-87-2	Methylcyclohexane	6.5	J
78-87-5	1,2-Dichloropropane	7.2	U

Form 1A-OR

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## EPA SAMPLE NO. ESNQ2

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ESNP2\_\_\_ Lab Code: EQI Case No.: 47927 Level: \_\_\_\_LOW Analytical Method: VOA Matrix: Soil Sample wt/vol: 4.17 (g/mL) 9 Lab File ID: 131029A14 Date Received: 10/24/2018 % Solids: 82.9 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column: \_\_\_\_\_ ID: \_\_\_\_ (mm) Date Analyzed: 10/29/2018 Extract Concentrated: (Y/N)\_\_\_\_\_ Extract Volume: (uL) Extraction Type: <u>PT</u> Soil Aliquot (VOA): \_\_\_\_\_ (uL) Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_ (uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Purge Volume: <u>5.0</u> (mL) Cleanup Factor: \_\_\_\_\_ Cleanup Types:\_\_\_\_\_ ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q .
75-27-4	Bromodichloromethane	7.2	U
10061-01-5	cis-1,3-Dichloropropene	7.2	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	6.6	J
10061-02-6	trans-1,3-Dichloropropene	7.2	U
79-00-5	1,1,2-Trichloroethane	7.2	U
127-18-4	Tetrachloroethene	7.2	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	7.2	U
106-93-4	1,2-Dibromoethane	7.2	U
108-90-7	Chlorobenzene	7.2	U
100-41-4	Ethylbenzene	7.2	. U
179601-23-1	m, p-Xylene	7.2	U
95-47-6	o-Xylene	7.2	U
100-42-5	Styrene	7.2	U
75-25-2	Bromoform	7.2	U
98-82-8	Isopropylbenzene	7.2	U
79-34-5	1,1,2,2-Tetrachloroethane	7.2	U
541-73-1	1,3-Dichlorobenzene	7.2	U
106-46-7	1,4-Dichlorobenzene	7.2	U
95-50-1	1,2-Dichlorobenzene	7.2	U
96-12-8	1,2-Dibromo-3-chloropropane	7.2	U
120-82-1	1,2,4-Trichlorobenzene	7.2	U
87-61-6	1,2,3-Trichlorobenzene	7.2	U

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ESNQ2

Lab Name: Shealy E	Invironmental Services, Inc.	Contract:_	EP-W-1403	5	
Lab Code: EQI Case No.: 47927		MA No.: SDG No.: ESNP2			
	od: VOA	Level:		1000	
Matrix: Soil		Lab Sample		3060-019	
Sample wt/vol:	4.17 (g/mL) g	Lab File I			
% Solids: 82.9		Date Recei	ved: 10/2	24/2018 ··· ··	
GC Column: DB-62	4 ID: 0.25 (mm)	Date Extra	cted:		
	ated: (Y/N)	Date Analy	zed: 10/2	29/2018	
	A): (uL)				(uL)
Heated Purge: (Y	/N) Y			Г	
Purge Volume:	5.0 (mL)				
				Factor: <u>1.0</u>	
	its (ug/L, ug/Kg):ug/kg				
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q 12
556-67.2	Unknown-01 Cyclotetras	loxane octa	- 12.19	c.c. 27	/22 /22
2	Unknown-02	1 2 2	13.54	1	JB
)3	Unknown-03		14.71	91	JB
94	Unknown-04		15.90	17	JB
.5					
-				-	
7		•			
8	1				
9					
1					
2					
3					
4					
5					
6					
7					
8					
9					
1			A.1		
2					
3					
4					
5					
6					
7					
8					
9				1	
0			27 /		
E966796 <sup>2</sup>	Total Alkanes	1	N/A	1	1

Form 1B-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EFA SAMPLE NU.

ESNQ2RE

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035	
Lab Code: EQI Case No.: 47927 Analytical Method: VOA	MA No.: SDG No.:_ESNP2	
Matrix: Soil	Lab Sample ID:	
Sample wt/vol:3.95 (g/mL) 9 % Solids:82.9	Lab File ID: <u>131031A12</u> Date Received: <u>10/24/2018</u>	
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:	
GC Column: ID: (mm)	Date Analyzed: <u>10/31/2018</u>	
Extract Concentrated: (Y/N)	Extract Volume: (uL)	
Soil Aliquot (VOA): (uL)	Extraction Type:PT	
Heated Purge: (Y/N) Y	Injection Volume: (uL)	
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0	
Cleanup Types:	Cleanup Factor:	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	7.6	U
74-87-3	Chloromethane	7.6	U
75-01-4	Vinyl chloride	7.6	U
74-83-9	Bromomethane	7.6	U
75-00-3	Chloroethane	7.6	U
75-69-4	Trichlorofluoromethane	7.6	U
75-35-4	1,1-Dichloroethene	7.6	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	7.6	U
67-64-1	Acetone	15	U
75-15-0	Carbon disulfide	7.6	U
79-20-9	Methyl acetate	7.6	U
75-09-2	Methylene chloride	7.6	U
156-60-5	trans-1,2-Dichloroethene	7.6	U
.1634-04-4	Methyl tert-butyl ether	7.6	U
75-34-3	1,1-Dichloroethane	7.6	U
156-59-2	cis-1,2-Dichloroethene	7.6	U
78-93-3	2-Butanone	15	U
74-97-5	Bromochloromethane	7.6	U
67-66-3	Chloroform	7.6	U
71-55-6	1,1,1-Trichloroethane	2.2	J
110-82-7	Cyclohexane	7.6	U
56-23-5	Carbon tetrachloride	7.6	U
71-43-2	Benzene	7.6	U
107-06-2	1,2-Dichloroethane	7.6	U
79-01-6	Trichloroethene	7.6	U
108-87-2	Methylcyclohexane	3.0	J
78-87-5	1,2-Dichloropropane	7.6	U

Form 1A-OR

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# FORM 1A-OR TARGET ANALYTE LIST

EPA SAMPLE NO. ORGANIC ANALYSIS DATA SHEET ESNQ2RE Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Case No.: 47927 Level: LOW Analytical Method: VOA Matrix: Soil Lab Sample ID: TJ23060-019 3.95 (g/mL) g Sample wt/vol: Lab File ID: 131031A12 % Solids: 82.9 Date Received: 10/24/2018 GC Column: DB-624 ID: 0.25 (mm) Date Extracted: GC Column:\_\_\_\_\_ ID:\_\_\_\_ (mm) Date Analyzed: 10/31/2018 Extract Volume: Extract Concentrated: (Y/N) (11L) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type:\_\_PT Heated Purge: (Y/N) Y Injection Volume:\_\_\_\_\_(uL) Purge Volume: 5.0 \_\_\_\_\_(mL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Star Star Star Cleanup Types:\_\_\_\_\_ Cleanup Factor:

ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	7.6	U
10061-01-5	cis-1,3-Dichloropropene	7.6	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	7.6	U
10061-02-6	trans-1,3-Dichloropropene	7.6	U
79-00-5	1,1,2-Trichloroethane	7.6	U
127-18-4	Tetrachloroethene	7.6	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	7.6	U
106-93-4	1,2-Dibromoethane	7.6	U
108-90-7	Chlorobenzene	7.6	U
100-41-4	Ethylbenzene	7.6	U
179601-23-1	m, p-Xylene	7.6	U
95-47-6	o-Xylene	7.6	U
100-42-5	Styrene	7.6	U
75-25-2	Bromoform	7.6	U
98-82-8	Isopropylbenzene	7.6	U
79-34-5	1,1,2,2-Tetrachloroethane	7.6	U
541-73-1	1,3-Dichlorobenzene	7.6	U
106-46-7	1,4-Dichlorobenzene	7.6	U
95-50-1	1,2-Dichlorobenzene	7.6	υ
96-12-8	1,2-Dibromo-3-chloropropane	7.6	U
120-82-1	1,2,4-Trichlorobenzene	7.6	U
87-61-6	1,2,3-Trichlorobenzene	7.6	U

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Form 1A-OR

EPA SAMPLE NO.

ESNQ2RE

Lab Name: Shealy Er	vironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	G No.: ESNF	2
Analytical Method	a: VOA	Level:	_OW		
Matrix: Soil		Lab Sample	ID:	060-019	
Sample wt/vol:	3.95 (g/mL) <u>g</u>	Lab File ID	:1310	31A12	
% Solids: 82.9		Date Receiv	ed: 10/2	4/2018	
GC Column: DB-624	ID: 0.25 (mm)				
Extract Concentra	ated: (Y/N)	Date Analyz	ed: <u>10/3</u>	1/2018	
Soil Aliquot (VOA	A):(uL)				
Heated Purge: (Y/	YN) Y	Extraction	Type: PT	•	
Purge Volume: <u>5</u>	(mL)	Injection V	olume:		*******
Cleanup Types:		рН:	Dilution	Factor: <u>1.0</u>	
Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	tor:		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
556-67-2	Unknown-01 Cydotetras	loxane octa	- 12.19	C.C. 39	JB C
	Unknown-02		13.54		JB
3	Unknown-03		14.71		
5	Unknown-04		15.90	47	J
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8					
5					
/					
3					
) 	l			L	
E966796 <sup>2</sup>	Total Alkanes		N/A		
<sup>2</sup> EPA-designated Re	egistry Number. C.C. =	common	laborate	org conta	mina
	Form 3	1B-OR		SOM02.4 (10 354 c	

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO. ESNQ3

TARGET ANAL	LYTE LIST
Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2 30
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: <u>3.87</u> (g/mL) <u>9</u>	Lab File ID:131029A15
% Solids: <u>81.4</u>	Date Received: 10/24/2018
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed:10/29/2018
Extract Concentrated: (Y/N)	Extract Volume:(uL)
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	7.9	U
74-87-3	Chloromethane	7.9	U
75-01-4	Vinyl chloride	7.9	U
74-83-9	Bromomethane	7.9	U
75-00-3	Chloroethane	7.9	U
75-69-4	Trichlorofluoromethane	7.9	U
75-35-4	1,1-Dichloroethene	7.9	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	7.9	U
67-64-1	Acetone	16	U
75-15-0	Carbon disulfide	7.9	U
79-20-9	Methyl acetate	7.9	U
75-09-2	Methylene chloride	7.9	U
156-60-5	trans-1,2-Dichloroethene	7.9	U
1634-04-4	Methyl tert-butyl ether	7.9	U
75-34-3	1,1-Dichloroethane	7.9	U
156-59-2	cis-1,2-Dichloroethene	7.9	U
78-93-3	2-Butanone	16	U
74-97-5	Bromochloromethane	7.9	U
67-66-3	Chloroform	7.9	U
71-55-6	1,1,1-Trichloroethane	7.9	U
110-82-7	Cyclohexane	7.9	U
56-23-5	Carbon tetrachloride	7.9	U
71-43-2	Benzene	7.9	U
107-06-2	1,2-Dichloroethane	7.9	U
79-01-6	Trichloroethene	7.9	U
108-87-2	Methylcyclohexane	7.9	U
78-87-5	1,2-Dichloropropane	7.9	U

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ3

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035	
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2	
Analytical Method: VOA	Level:	
Matrix: Soil	Lab Sample ID: TJ23060-020	
Sample wt/vol: (g/mL)	Lab File ID:131029A15	
% Solids: 81.4	Date Received: 10/24/2018	
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:	
GC Column:ID:(mm)	Date Analyzed: 10/29/2018	
Extract Concentrated: (Y/N)	Extract Volumo: (uL)	
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>	
Heated Purge: (Y/N) Y	Injection Volume: (uL)	
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0	
Cleanup Types:	Cleanup Factor:	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	7.9	U
10061-01-5	cis-1,3-Dichloropropene	7.9	U
108-10-1	4-Methyl-2-pentanone	16	U
108-88-3	Toluene	7.9	U
10061-02-6	trans-1,3-Dichloropropene	7.9	U
79-00-5	1,1,2-Trichloroethane	7.9	U
127-18-4	Tetrachloroethene	7.9	U
591-78-6	2-Hexanone	16	U
124-48-1	Dibromochloromethane	7.9	U
106-93-4	1,2-Dibromoethane	7.9	U
108-90-7	Chlorobenzene	7.9	U
100-41-4	Ethylbenzene	7.9	U
179601-23-1	m, p-Xylene	7.9	U
95-47-6	o-Xylene	7.9	U
100-42-5	Styrene	7.9	U
75-25-2	Bromoform	7.9	U
98-82-8	Isopropylbenzene	7.9	U
79-34-5	1,1,2,2-Tetrachloroethane	7.9	U
541-73-1	1,3-Dichlorobenzene	7.9	U
106-46-7	1,4-Dichlorobenzene	7.9	U
95-50-1	1,2-Dichlorobenzene	7.9	U
96-12-8	1,2-Dibromo-3-chloropropane	7.9	U
120-82-1	1,2,4-Trichlorobenzene	7.9	U
87-61-6	1,2,3-Trichlorobenzene	7.9	U

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# ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

ESNQ3

Lab Name: Shealy Environmental Services, Inc.	Contract:		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: VOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol: 3.87 (g/mL) g	Lab File ID: 131029A15		
% Solids: 81.4	Date Received: 10/24/2018		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
Extract Concentrated: (Y/N)	Date Analyzed: 10/29/2018		
Soil Aliquot (VOA): (uL)	Extract Volume:(uL)		
Heated Purge: (Y/N) Y	Extraction Type:PT		
Purge Volume: 5.0 (mL)	Injection Volume:		
Cleanup Types:	pH: Dilution Factor: 1.0		
Concentration Units (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Factor:		
CAS NUMBER COMPOUND NAME	RT EST. CONC. Q		
01			
02			
03			
04			
05			
06			
08			
09			
10			
11			
12			
13			
15			
17			
18			
19	· · · · · · · · · · · · · · · · · · ·		
20			
21			
22			
23			
24			
26			
27			
28			
29	······		
30			
E966796 <sup>2</sup> Total Alkanes	N/A		

<sup>2</sup>EPA-designated Registry Number.

Form 1B-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NU.

ESNQ3RE

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: VOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:4.35 (g/mL)	101001010		
% Solids:81.4	Date Received: 10/24/2018		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed:10/31/2018		
Extract Concentrated: (Y/N)			
Soil Aliquot (VOA): (uL)	Extraction Type: PT		
Heated Purge: (Y/N) Y	Injection Volume: (uL)		
Purge Volume: 5.0 (mL)	1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	7.1	U
74-87-3	Chloromethane	7.1	U
75-01-4	Vinyl chloride	7.1	U
74-83-9	Bromomethane	7.1	U
75-00-3	Chloroethane	7.1	U
75-69-4	Trichlorofluoromethane	7.1	U
75-35-4	1,1-Dichloroethene	7.1	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	7.1	U
67-64-1	Acetone	14	U
75-15-0	Carbon disulfide	7.1	U
79-20-9	Methyl acetate	7.1	<u> </u>
75-09-2	Methylene chloride	7.1	U
156-60-5	trans-1,2-Dichloroethene	7.1	U
1634-04-4	Methyl tert-butyl ether	7.1	U
75-34-3	1,1-Dichloroethane	7.1	U
156-59-2	cis-1,2-Dichloroethene	7.1	U
78-93-3	2-Butanone	14	U
74-97-5	Bromochloromethane	7.1	U
67-66-3	Chloroform	7.1	U
71-55-6	1,1,1-Trichloroethane	2.5	J
110-82-7	Cyclohexane	7.1	U
56-23-5	Carbon tetrachloride	7.1	U
71-43-2	Benzene	4.1	J
107-06-2	1,2-Dichloroethane	7.1	U
79-01-6	Trichloroethene	7.1	U
108-87-2	Methylcyclohexane	3.3	J
78-87-5	1,2-Dichloropropane	7.1	U

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ3RE

			L	
Lab Name: Shea	ly Environmental Services, Inc.	Contract:	EP-W-14035	
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: _ESN	IP2
	thod: VOA	Level:		
Matrix: Soil			e ID:	
Sample wt/vol:		Lab File 1	ID: <u>131031A13</u>	
% Solids: <u>8</u> 1	.4	Date Rece	ived: 10/24/2018	
GC Column: DB.	-624 ID: 0.25 (mm)	Date Extr	acted:	
GC Column:	ID: (mm)		yzed:10/31/2018	
Extract Concer			olume:	(11T)
	(uL)	Extraction	n Type:PT	
Heated Purge:	(Y/N) Y	Injection	Volume:	(uL)
Purge Volume:_	5.0 (mL)	рН:	Dilution Factor: <u>1.0</u>	
Cleanup Types:		Cleanup Fa	actor:	
	Units (ug/L, mg/L, ug/Kg):	ug/kg		
concentration		ug/kg		
CAS NO.	COMPOUND		CONCENTRATION	Q
75-27-4	Bromodichloromethane		7.1	U
10061-01-5	cis-1,3-Dichloropropene		7.1	U
108-10-1	4-Methyl-2-pentanone		14	U
108-88-3	Toluene		2.0	J
10061-02-6	trans-1,3-Dichloropropene	<u> </u>	7.1	U
79-00-5	1,1,2-Trichloroethane	······································	7.1	U
127-18-4	Tetrachloroethene		7.1	U
591-78-6	2-Hexanone		14	U
124-48-1	Dibromochloromethane		7.1	U
106-93-4	1,2-Dibromoethane		7.1	U
108-90-7	Chlorobenzene		7.1	U
100-41-4	Ethylbenzene		7.1	U
179601-23-1	m, p-Xylene		7.1	U
95-47-6	o-Xylene		7.1	U
100-42-5	Styrene		7.1	U
75-25-2	Bromoform		7.1	U
98-82-8	Isopropylbenzene			
79-34-5	1,1,2,2-Tetrachloroethane		7.1	U
541-73-1	1,3-Dichlorobenzene		7.1	U
106-46-7	1,4-Dichlorobenzene		7.1	<u>U</u>
95-50-1	1,2-Dichlorobenzene		7.1	U
96-12-8	1,2-Dibromo-3-chloropropane		7.1	U
120-82-1	1,2,4-Trichlorobenzene		7.1	U
87-61-6			7.1	U
0/-01-0	1,2,3-Trichlorobenzene		7.1	U

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Form 1A-OR

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### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ3RE

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.: _ ESNP2			P2
Analytical Method		Level:			
Matrix: Soil		Lab Sample		060-020	
Sample wt/vol:	4.35 (g/mL) g	Lab File II			
% Solids: 81.4		Date Receiv	ved: 10/2	4/2018	
GC Column: DB-624	4 ID: 0.25 (mm)	Date Extra	cted:		
Extract Concentra	ated: (Y/N)	Date Analy:	zed:10/3	1/2018	
	A):(uL)				(uL
	/N) Y	Extraction			
Purge Volume:		Injection N			
				Factor: <u>1.0</u>	
	its (ug/L, ug/Kg): <b>ug/kg</b>	Cleanup Fac			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
556-67-2	Cyclotetrasiloxane, octamethyl-	C. C.	12.19	11	NARI
127-91-3	.betaPinene		12.46		NJ
	Unknown-01		13.54	34	JB
	Unknown-02		14.71		J
	Unknown-03		15.90		J
	Unknown-04		16.70	15	J
	1				
L					
)					
)					
E966796 <sup>2</sup>	Total Alkanes		N/A		

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Form 1B-OR

VBLKAZ

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

 Lab Name:
 Shealy Environmental Services, Inc.
 C

 Lab Code:
 EQI
 Case No.:
 47927
 M

 Analytical Method:
 VOA
 I

 Matrix:
 Soil
 I

 Sample wt/vol:
 5.07
 (g/mL)
 g

 & Solids:
 100
 D

 GC Column:
 DB-624
 ID:
 0.25
 (mm)

 GC Column:
 ID:
 (mm)
 E

 Extract Concentrated:
 (Y/N)
 F,
 Soil Aliquot (VOA):
 (uL)

 Soil Aliquot (VOA):
 (uL)
 E
 Purge Volume:
 5.0
 (mL)
 p

 Cleanup Types:
 C
 Concentration Units (ug/L, mg/L, ug/Kg):
 C
 C

Contract: EP-W-14035	
MA No.: SDG No.: _ESNP2	
Level: LOW	
Lab Sample ID:	
Lab File ID: 131029A04	
Date Received:	
Date Extracted:	
Date Analyzed:10/29/2018	
Extract Volume:	( 11T, )
Extraction Type:PT	
Injection Volume:	(uL)
pH: Dilution Factor: 1.0	
Cleanup Factor:	
ua/ka	

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	4.9	U
74-87-3	Chloromethane	4.9	U
75-01-4	Vinyl chloride	4.9	U
74-83-9	Bromomethane	4.9	U
75-00-3	Chloroethane	4.9	U
75-69-4	Trichlorofluoromethane	4.9	U
75-35-4	1,1-Dichloroethene	4.9	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	4.9	U
67-64-1	Acetone	9.9	U
75-15-0	Carbon disulfide	4.9	U
79-20-9	Methyl acetate	4.9	U
75-09-2	Methylene chloride	4.9	U
156-60-5	trans-1,2-Dichloroethene	4.9	U
1634-04-4	Methyl tert-butyl ether	4.9	U
75-34-3	1,1-Dichloroethane	4.9	U
156-59-2	cis-1,2-Dichloroethene	4.9	U
78-93-3	2-Butanone	9.9	U
74-97-5	Bromochloromethane	4.9	U
67-66-3	Chloroform	4.9	U
71-55-6	1,1,1-Trichloroethane	4.9	U
110-82-7	Cyclohexane	4.9	U
56-23-5	Carbon tetrachloride	4.9	U
71-43-2	Benzene	4.9	U
107-06-2	1,2-Dichloroethane	4.9	U
79-01-6	Trichloroethene	4.9	U
108-87-2	Methylcyclohexane	4.9	U
78-87-5	1,2-Dichloropropane	4.9	U

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

VBLKAZ

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID: TQ87946-001
Sample wt/vol:5.07(g/mL)	Lab File ID:131029A04
% Solids: 100	Date Received:
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column:ID:(mm)	Date Analyzed: 10/29/2018
Extract Concentrated: (Y/N)	Extract Volume: (uI)
Soil Aliquot (VOA): (uL)	Extraction Type:PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	4.9	U
10061-01-5	cis-1,3-Dichloropropene	4.9	U
108-10-1	4-Methyl-2-pentanone	9.9	U
108-88-3	Toluene	4.9	U
10061-02-6	trans-1,3-Dichloropropene	4.9	U
79-00-5	1,1,2-Trichloroethane	4.9	U
127-18-4	Tetrachloroethene	4.9	U
591-78-6	2-Hexanone	9.9	U
124-48-1	Dibromochloromethane	4.9	U
106-93-4	1,2-Dibromoethane	4.9	U
108-90-7	Chlorobenzene	4.9	U
100-41-4	Ethylbenzene	4.9	U
179601-23-1	m, p-Xylene	4.9	U
95-47-6	o-Xylene	4.9	U
100-42-5	Styrene .	4.9	U
75-25-2	Bromoform	4.9	U
98-82-8	Isopropylbenzene	4.9	U
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U
541-73-1	1,3-Dichlorobenzene	4.9	U
106-46-7	1,4-Dichlorobenzene	4.9	U
95-50-1	1,2-Dichlorobenzene	4.9	U
96-12-8	1,2-Dibromo-3-chloropropane	4.9	U
120-82-1	1,2,4-Trichlorobenzene	4.9	U
87-61-6	1,2,3-Trichlorobenzene	4.9	U

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VBLKAZ

Lab Name: Shealy Environment	al Services, Inc. Contract:	EP-W-1403	5	
Lab Code: EQI Cas	e No.: 47927 MA No.:_	S	DG No.: ESN	P2
Analytical Method: VOA				
Matrix: Soil	Lab Sampl	.e ID: TQ8	37946-001	
Sample wt/vol: 5.07	(g/mL) <b>g</b> Lab File	ID: 131	029A04	
% Solids: 100	Date Rece	ived:		···· ··· ·
GC Column: DB-624 I		acted:		
	//N) Date Anal			
Soil Aliquot (VOA):				(uL)
Heated Purge: (Y/N) Y		n Type: P		````
Purge Volume: 5.0				
Cleanup Types:		-	n Factor: <u>1.0</u>	
Concentration Units (ug/	L, ug/Kg): Ug/Kg Cleanup F	actor:		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1 556-67-Z Unknow	n-01 Cydotetrasiloxane, och	12.19	C.C. 6.3	
Unknow	n-02	13.54	6.7	J
Ja Unknow		14.71		J
4 Unknow		15.90		J
5				
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8				
9				
0				
E966796 <sup>2</sup> Total <i>F</i>		N/A		
<sup>2</sup> EPA-designated Registry	Number. C.C. = COMMON	laborator	y contam	Mart
			7	
	Form 1B-OR		SOM02.4 (10	•
	HRS Page Number 187		561 o	f 2916
	inter age runner 101			

FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST EPA SAMPLE NO.

VBLKCM

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: VOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:5.03 (g/mL) 9	
% Solids:100	Date Received:
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:
GC Column: ID: (mm)	Date Analyzed:10/31/2018
Extract Concentrated: (Y/N)	Extract Volume:(uL)
Soil Aliquot (VOA): (uL)	Extraction Type: PT
Heated Purge: (Y/N) Y	Injection Volume: (uL)
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	5.0	U
67-64-1	Acetone	9.9	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	9.9	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U

Form 1A-OR

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VBLKCM

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Concentration Units (ug/L, mg/L, ug/Kg):

Contract: EP-W-14	035	
MA No.:	SDG No.: ESNP2	
Level: LOW		·····
Lab Sample ID:	Q88210-001	
Lab File ID:	31031A04	
Date Received:		
Date Extracted:		
	10/31/2018	
Extract Volume:		( 11T, )
Extraction Type:_	PT	
Injection Volume:		(uL)
pH: Diluti	on Factor: <u>1.0</u>	
Cleanup Factor:		Ootaalaanaa
ua/ka		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	9.9	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.4	J
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	Ū
100-41-4	Ethylbenzene	5.0	Ū
179601-23-1	m, p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

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Form 1A-OR

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### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKCM

Lab Name: Shealy Environme	ntal Services, Inc.	Contract: _	EP-W-14035			
Lab Code: EQI Ca	ase No.: 47927	MA No.:	SI	DG No.: ESN	P2	
Analytical Method: VOA	4	Level:	_OW			
Matrix: Soil		Lab Sample	ID: TQ8	3210-001		
Sample wt/vol: 5.0	3 (g/mL) <b>g</b>	Lab File ID	1310	)31A04		
% Solids:		Date Receiv	red:			
GC Column: DB-624	ID: 0.25 (mm)	Date Extrac	ted:			
Extract Concentrated:	(Y/N)	Date Analyz	ed: 10/3	1/2018		
Soil Aliquot (VOA):	(uL)	Extract Vol	ume:		(uL)	
Heated Purge: (Y/N) Y		Extraction	Type: PT	•		
Purgo Volumo: <u>5.0</u>		Injection V	olume:			
Cleanup Types:		pH:	Dilution	Factor: <u>1.0</u>		
Concentration Units (u	g/L, ug/Kg): <u>ug/kg</u>					
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q	acit
1 556-67-2 Cyclot	tetrasiloxane, octamethyl-	C.C	12.19	5.1	NOV	12-10-18
2 Unkno	own-01		13.54	5.2	J	
3						
4	<u></u>					
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6	••••••••••••••••••••••••••••••••••••••		•			
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E966796 <sup>2</sup> Tota			N/A			

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

VBLKYN

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: _VOA	Level:LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:5.04 (g/mL)	Lab File ID: 131025A04		
% Solids:100	Date Received:		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed:10/25/2018		
Extract Concentrated: (Y/N)	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: <u>PT</u>		
Heated Purge: (Y/N) Y	Injection Volume: (uL)		
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	5.0	U
67-64-1	Acetone	9.9	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	9.9	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

VBLKYN

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ESNP2		
Analytical Method: VOA	Level:		
Matrix: Soil	Lab Sample ID:TQ87571-001		
Sample wt/vol:5.04 (g/mL)	Lab File ID:131025A04		
% Solids: 100	Date Received:		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed: 10/25/2018		
Extract Concentrated: (Y/N)	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type:PT		
Heated Purge: (Y/N) Y	Injection Volume: (uL)		
Purge Volume: <u>5.0</u> (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	9.9	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	1.9	J
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene <sup>.</sup>	5.0	U
179601-23-1	m, p-Xylene	5.0	U
95-47-6	o-Xylene	. 5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropröpane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

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VBLKYN

Lab Name: Shealy Er	nvironmental Services, Inc.	Contract:	EP-W-14035	;	
Lab Code: EQI Case No.: 47927		MA No.: SDG No.: _ESNP2			
	d:	Level:		Pa	
Matrix: Soil				7571-001	*****
<b></b>	5.04 (g/mL) g	Lab Sample ID: TQ87571-001 Lab File ID: 131025A04			
% Solids: 100					
	ID: 0.25 (mm)				
	ated: (Y/N) (Mult)	Date Analy		5/2018	
					(177.)
	A): (uL)			7	
	/N) Y				
	• Q (mT,)				
		рН:	Dilution	Factor: <u>1.0</u>	O
Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fa	ctor:		12
CAS NUMBER	COMPOUND NAME	·	RT	EST. CONC.	Q
556-67-2	Cyclotetrasiloxane, octamethyl-	<u> </u>		ESI. CONC. 6.6	A 7 1
556-67-2	Unknown-01	<u> </u>	13.54		JUUU
	Unknown-02		13.54		J
	Unknown-03		14.71		J
	omanown 05		13.50	<u>+</u> _	0
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Form 1B-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

VHBLK01

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: VOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:5.04 (g/mL)	Lab File ID: 131031A14		
% Solids: 100	Date Received:		
GC Column: DB-624 ID: 0.25 (mm)	Date Extracted:		
GC Column: ID: (mm)	Date Analyzed: 10/31/2018		
Extract Concentrated: (Y/N)	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: PT		
Heated Purge: (Y/N) Y	Injection Volume: (uL)		
Purge Volume: 5.0 (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	5.0	U
67-64-1	Acetone	9.9	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	9.9	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

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EPA SAMPLE NO.

VHBLK01

Lab Name: Shea	ly Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.:_ ESNP2
Analytical Met	hod: VOA	Level: LOW
Matrix: Soil		Lab Sample ID:TJ23060-008
	5.04 (g/mL) 9	
		- hab file ib
% Solids: 10	0	Date Received:
GC Column: DB-	624 ID: 0.25 (mm	) Date Extracted:
GC Column:	ID: (mm	Date Analyzed:10/31/2018
Extract Concen	trated: (Y/N)	Extract Volume:(uL)
Soil Aliquot (	VOA):(uL	Extraction Type:PT
	(Y/N) Y	
	5.0 (mL	
Cleanup Types:	·····	_ Cleanup Factor:
Concentration	Units (ug/L, mg/L, ug/Kg)	ug/kg
CAS NO.	COMPOUND	CONCENTRATION Q
75-27-4	Bromodichloromethane	5.0 U
10061-01-5	cis-1,3-Dichloropropene	5.0 U
108-10-1	4-Methyl-2-pentanone	9.9 U
108-88-3	Toluene	5.0 U
10061-02-6	trans-1,3-Dichloroproper	e 5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
127-18-4	Tetrachloroethene	5.0 U
591-78-6	2-Hexanone	U 9.9
124-48-1	Dibromochloromethane	5.0 U
106-93-4	1,2-Dibromoethane	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
179601-23-1	m, p-Xylene	5.0 U
95-47-6	o-Xylene	5.0 U
100-42-5	Styrene	5.0 U
75-25-2	Bromoform	5.0 U
98-82-8	Isopropulbenzene	5 0 11

 $u_{i} = \left\{ \left| u_{i} \right| < \left|$ 

1,1,2,2-Tetrachloroethane

1,2-Dibromo-3-chloropropane

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,2-Dichlorobenzene

1,2,4-Trichlorobenzene

1,2,3-Trichlorobenzene

79-34-5

541-73-1

106-46-7

95-50-1

96-12-8

120-82-1

87-61-6

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### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK01

				L	
Lab Name: Shealy Er	vironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Method	a: VOA	Level:			
Matrix: Soil		Lab Sample		060-008	
Sample wt/vol:	5.04 (g/mL) g	Lab File I			
% Solids: 100		Date Recei	ved:		
GC Column: DB-624	ID: 0.25 (mm)	Date Extra	cted:		
Extract Concentra	ated: (Y/N)	Date Analy	zed: 10/3	1/2018	
	A):(uL)				(uL)
	(N) Y	Extraction			
	.Ω(mL)				
		-		Factor: 1.0	
	.ts (ug/L, ug/Kg):ug/kg	Cleanup Fa			
	· · · · · · · · · · · · · · · · · · ·			•	
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01 556-67-2	Cyclotetrasiloxane, octamethyl-	C.C.	12.19	7.2	<sub>Ņ</sub> ⁄лв V
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03					
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9						
0						
E966796 <sup>2</sup>	Total Alkanes			N/A		
<sup>2</sup> EPA-designated Re	egistry Number. C.C. >	<b>Commons</b> Form 1	laboratory B-OR	contan	N rad SOM02.4 (10 584 of	

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### FORM 2A-OR DEUTERATED MONITORING COMPOUND RECOVERY

Lab	Name:	Shealy	Environmental	Services,	Inc.
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Lab Code: EQI Case No.: 47927

AnalyticalMethod: SVOA

Matrix: Soil

EPA SAMPLE NO.	DMC	1	DMC2	DMC3	DMC 4	DMC5	DMC 6	DMC7	DMC 8	DMC 9
ESNP2	23	*	77	67	90	81	15	66	73	80
ESNP3	28	*	71	61	84	74	15	61	68	75
ESNP4	28	D	67	57	77	69	30	63	64	71
ESNP5	17	D	62	56	74	58	18	61	65	68
ESNP6	29	D	77	64	89	78	25	68	71	73
ESNP7	21	D	76	66	88	78	28	72	72	80
ESNP8	24	D	72	64	83	69	22	67	72	80
ESNP9	18	*	65	54	74	69	34	54	58	65
ESNQ0	21	D	77	69	93	80	10	73	75	80
ESNQ1	30	D	69	60	83	62	23	69	71	71
ESNQ1DL	0	D	51	53	67	48	0 D	0 D	51	57
ESNQ2	0	D	69	63	75	66	0 D	0 D	53	61
ESNQ2DL	0	D	0 D	85	91	75	0 D	0 D	67	70
ESNQ3	0	D	123	108	126 D	123	0 D	0 D	107	125
ESNQ3DL	0	D	0 D	0 D	0 D	0 D		0 D	0 D	0 D
ESNP6MSD	24	D	68	58	79	67	22	62	67	72
ESNP6MS	31	D	82	67	95	82	39	74	80	83
SBLK68	23	*	97	86	113	102	91	86	91	104

DMC1 = 1,4-Dioxane-d8 DMC2 = Phenol-d5 DMC3 = bis-(2-chloroethyl)ether-d8 DMC4 = 2-Chlorophenol-d4 DMC5 = 4-Methylphenol-d8 DMC6 = 4-Chloroaniline-d4 DMC7 = Nitrobenzene-d5	<u>QC LIMITS</u> 40-110 10-130 10-150 15-120 10-140 1-145 10-135
DMC8 = 2-Nitrophenol-d4 DMC9 = 2,4-Dichlorophenol-d3	10-135 10-120 10-140
* Values outside of contract required QC limits D DMC diluted out	

Form 2A-OR

Contract: <u>EP-W-14035</u> MA No.: \_\_\_\_\_\_ SDG No.: ESNP2

Level: LOW

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### FORM 2B-OR DEUTERATED MONITORING COMPOUND RECOVERY

Lab	Name:	Shealy	Environmental	Services, I	nc.

Lab Code: <u>EQI</u> Case No.: <u>47927</u>

AnalyticalMethod: SVOA

MA No.: \_\_\_\_\_ SDG No.: ESNP2

Contract: EP-W-14035

Level: LOW

Matrix: Soil

EPA SAMPLE NO.	DMC10	DMC11	DMC12	DMC13	DMC14	DMC15	DMC16	DMC17	DMC18	TOT OUT
ESNP2	71	68	69	68	55	77	75	78		1
ESNP3	66	64	62	61	54	72	73	71		1
ESNP4	70	69	59	67	38	79	80	79		0
ESNP5	75	70	66	68	40	86	91	84		0
ESNP6	65	65	58	62	37	71	74	72		0
ESNP7	76	73	78	74	48	82	86	81		0
ESNP8	71	70	73	69	41	77	85	73		0
ESNP9	59	56	63	54	62	62	67	63		1
ESNQO	77	77	72	70	34	82	78	81		0
ESNQ1	71	71	78	69	37	80	82	73		0
ESNQ1DL	55	53	45	55	0 D	65	67	65		0
ESNQ2	62	63	59	59	0 D	77	73	62		0
ESNQ2DL	80	82 ·	0 D	81	0 D	108	111	107		0
ESNQ3	122	116	0 D	116	0 D	174 D	138 D	115		0
ESNQ3DL	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0 D		0
ESNP6MSD	68	66	67	64	50	72	79	72		, 0
ESNP6MS	80	77	79	71	51	80	88	81		0
SBLK68	99	90	91	85	91 ·	100	116	110		1
······································					· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			

	QC LIMITS
DMC10 = Dimethylphthalate-d6	10-145
DMC11 = Acenaphthylene-d8	15-120
DMC12 = 4-Nitrophenol-d4	10-150
DMC13 = Fluorene-d10	20-140
DMC14 = 4,6-Dinitro-2-methylphenol-d2	10-130
DMC15 = Anthracene-d10	10-150
DMC16 = Pyrene-d10	10-130
DMC17 = Benzo(a)pyrene-d12	10-140

\* Values outside of contract required QC limits

D DMC diluted out

Form 2B-OR

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### FORM 3A-OR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: SVOA	Level:Low
Matrix: Soil	······································
EPA Sample No. (Matrix Spike/Matrix Spike	Duplicate): ESNP6
Instrument ID: <u>Agilent_MSD12</u>	GC Column: Zebron ZB-SV ID: 0.25 (mm)
Concentration Units (ug/L, mg/L, ug/kg): _	ug/kg

ANALYTE	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS %REC #	QC LIMITS REC.
Phenol	5100	0	2200	86	26-90
2-Chlorophenol	5100	0	2100	82	25-102
N-Nitroso-di-n propylamine	5100	0	2100	81	41-126
4-Chloro-3-methylphenol	5100	0	2300	90	26-103
Acenaphthene	5100	250	2100	72	31-137
4-Nitrophenol	5100	0	2300	91	11-114
2,4-Dinitrotoluene	5100	0	2100	81	28-89
Pentachlorophenol	5100	0	2600	103	17-109
Pyrene	5100	11000	7000	-166 *	35-142

ANALYTE	SPIKE	MSD			QC LIMITS	
	ADDED	CONCENTRATION	MSD %R #	RPD #	RPD	%R
Phenol	5200	1800	69	22	0-35	26-90
2-Chlorophenol	5200	1600	63	26	0-50	25-102
N-Nitroso-di-n propylamine	5200	1700	65	22	0-38	41-126
4-Chloro-3-methylphenol	5200	2000	76	17	0-33	26-103
Acenaphthene	5200	1800	61	17	0-19	31-137
4-Nitrophenol	5200	1900	72	23	0-50	11-114
2,4-Dinitrotoluene	5200	1800	69	16	0-47	28-89
Pentachlorophenol	5200	2200	86	18	0-47	17-109
Pyrene	5200	7500	-143 *	-15 *	0-36	35-142

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC Limits

Form 3A-OR

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### FORM 4-OR METHOD BLANK SUMMARY

SBLK68

Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method:SVOA	
Matrix: Soil	·····
Instrument ID: Agilent MSD12	
Extraction Type:SONC	
GC Column(1): Zebron ZB-SV ID: 0.25	(mm)
GC Column(2):ID:	(mm)
Heated Purge: (Y/N) Cleanup: (Y/N)	Y

Contract: <u>EP-W-14035</u>
MA No: SDG No.: ESNP2
Level: LOW
Lab Sample ID: TQ87468-001
Lab File ID:12110109
Date Extracted: <u>10/24/2018</u>
Date Analyzed: <u>11/01/2018</u>
Time Analyzed: <u>14:04</u>
Cleanup Types: <u>CPC</u>

EPA	LAB	LAB	DATE/TIME
SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
ESNP2	TJ23060-009	12110820	11/08/2018 17:31
ESNP3	TJ23060-010	12110821	11/08/2018 17:57
ESNP4	TJ23060-011	12110219	11/02/2018 17:06
ESNP5	TJ23060-012	12110220	11/02/2018 17:32
ESNP6	TJ23060-013	12110221	11/02/2018 17:58
ESNP7	TJ23060-014	12110224	11/02/2018 19:15
ESNP8	TJ23060-015	12110225	11/02/2018 19:41
ESNP9	TJ23060-016	12110116	11/01/2018 17:05
ESNQ0	TJ23060-017	12110226	11/02/2018 20:06
ESNQ1	TJ23060-018	12110227	11/02/2018 20:32
ESNQ1DL	TJ23060-018	12110130	11/01/2018 23:05
ESNQ2	TJ23060-019	12110131	11/01/2018 23:31
ESNO2DL	TJ23060-019	12110213	11/02/2018 14:31
ESN03	TJ23060-020	12110132	11/01/2018 23:57
ESN03DL	TJ23060-020	12110214	11/02/2018 14:57
ESNP6MSD	TJ23060-013MD	12110223	11/02/2018 18:49
ESNP6MS	TJ23060-013MS	12110222	11/02/2018 18:23
			;
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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method:SVOA	
EPA Sample No.:SSTD020YB	
Instrument ID: Agilent_MSD12	
GC Column: Zebron ZB-SV ID: 0.25 (m	nm )
Heated Purge: (Y/N)	

Contract: EP-W-14035	
MA No.: SDG No.:ESNP2	
Level:Low	
Lab File ID (Standard):12110104	
<pre>Init. Calib. Date(s): 11/01/2018</pre>	11/01/2018
Date Analyzed: <u>11/01/2018</u>	
Time Analyzed: 1145	

	IS1 AREA	RT	IS2 AREA	RT	IS3 AREA	RT
12 HOUR STD	22831	5.78	106257	6.83	54513	8.32
UPPER LIMIT	45662	6.28	212514	7.33	109026	8.82
LOWER LIMIT	11416	5.28	53129	6.33	27257	7.82
EPA SAMPLE NO.						
ESNP9	25940	5.78	123516	6.83	71067	8.33
SBLK68	14987	5.78	67145	6.83	39168	8.32

<pre>IS1 = 1,4-Dichlorobenzene-d4 IS2 = Naphthalene-d8 IS3 = Acenaphthene-d10</pre>
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.
Lab Code: EQI Case No.: 47927
Analytical Method:SVOA
EPA Sample No.:SSTD020YB
Instrument ID: <u>Agilent MSD12</u>
GC Column: Zebron ZB-SV ID: 0.25 (mm)
Heated Purge: (Y/N)

Contract: EP-W-14035	
MA No.: SDG No.: ESNP	2
Level:Low	
Lab File ID (Standard):12110104	
Init. Calib. Date(s): <u>11/01/2018</u>	11/01/2018
Date Analyzed: <u>11/01/2018</u>	
Time Analyzed: <u>1145</u>	

	IS4 AREA	RT	1S5 AREA	RT	1S6 AREA	RT
12 HOUR STD	103740	9.59	117828	12.40	115159	14.59
UPPER LIMIT	207480	10.09	235656	12.90	230318	15.09
LOWER LIMIT	51870	9.09	58914	11.90	57580	14.09
EPA SAMPLE NO.						
ESNP9	127215	9.59	142035	12.40	166329	14.60
SBLK68	71005	9.59	73682	12.40	86190	14.59

<pre>IS4 = Phenanthrene- IS5 = Chrysene-d12 IS6 = Perylene-d12</pre>	-d10
AREA UPPER LIMIT =	200% internal standard area
AREA LOWER LIMIT =	50% internal standard area
RT UPPER LIMIT =	+ 0.50 minutes of internal standard RT
RT LOWER LIMIT =	- 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method: SVOA	
EPA Sample No.:SSTD020YD	
Instrument ID: <u>Agilent MSD12</u>	
GC Column: Zebron ZB-SV ID: 0.25 (r	nm )
Heated Purge: (Y/N)	

Contract: EP-W-14035
MA No.: SDG No.: ESNP2
Level:Low
Lab File ID (Standard): 12110118
Init. Calib. Date(s): 11/01/2018 11/01/2018
Date Analyzed: 11/01/2018
Time Analyzed: 1756

Γ	IS1	······································	IS2		IS3	
	AREA	RT	AREA	RT	AREA	RT
12 HOUR STD	27472	5.78	125718	6.83	64802	8.32
UPPER LIMIT	54944	6.28	251436	7.33	129604	8.82
LOWER LIMIT	13736	5.28	62859	6.33	32401	7.82
EPA SAMPLE NO.						
ESNQ1DL	34976	5.78	163622	6.83	92798	8.33
ESNQ2	31415	5.78	147871	6.83	87677	8.32
ESNQ3	34439	5.78	160445	6.83	92620	8.32
				,		

IS1 = 1,4-Dichlorobenzene-d4 IS2 = Naphthalene-d8 IS3 = Acenaphthene-d10
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method:SVOA	
EPA Sample No.:SSTD020YD	
Instrument ID: Agilent MSD12	
GC Column: Zebron ZB-SV ID: 0.25 (mr	n)
Heated Purge: (Y/N)	

Contract: EP-W-14035	
MA No.: SDG No.: ESNP2	2
Level:Low	
Lab File ID (Standard):12110118	
Init. Calib. Date(s): <u>11/01/2018</u>	11/01/2018
Date Analyzed: <u>11/01/2018</u>	
Time Analyzed: <u>1756</u>	

	IS4 AREA	RT	⊥s5 AREA	RT	IS6 AREA	RT
12 HOUR STD	131259	9.59	133319	12.40	137178	14.60
UPPER LIMIT	262518	10.09	266638	12.90	274356	15.10
LOWER LIMIT	65630	9.09	66660	11.90	68589	14.10
EPA SAMPLE NO.						
ESNQIDL	155812	9.59	157880	12.40	185931	14.60
ESNQ2	161437	9.60	195177	12.41	248913	14.61
ESNQ3	172574	9.60	244720	12.42	272661	14.62
				L		
	L					

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method:SVOA	
EPA Sample No.:SSTD020YG	
Instrument ID: Agilent_MSD12	
GC Column: Zebron ZB-SV ID: 0.25 (m	m)
Heated Purge: (Y/N)	

Contract: EP-W-14035
MA No.: SDG No.:ESNP2
Level:
Lab File ID (Standard):12110202
Init. Calib. Date(s): 11/01/2018 11/01/2018
Date Analyzed: 11/02/2018
Time Analyzed: 0945

	IS1 AREA	RT	IS2 AREA	RT	IS3 AREA	RT
12 HOUR STD	24383	5.78	111480	6.83	59953	8.32
UPPER LIMIT	48766	6.28	222960	7.33	119906	8.82
LOWER LIMIT	12192	5.28	55740	6.33	29977	7.82
EPA SAMPLE NO.						
ESNQ2DL	22051	5.78	107419	6.83	62314	8.32
ESNQ3DL	23956	5.78	117093	6.83	68694	8.32
				••••••••••••••••••••••••••••••••••••••		
						1999 - A. 1999 -

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method:SVOA	
EPA Sample No.:SSTD020YG	
Instrument ID: Agilent_MSD12	
GC Column: Zebron ZB-SV ID: 0.25 (m	m)
Heated Purge: (Y/N)	

Contract: EP-W-14035
MA No.: SDG No.: ESNP2
Level:Low
Lab File ID (Standard): <u>12110202</u>
Init. Calib. Date(s): 11/01/2018 11/01/2018
Date Analyzed: <u>11/02/2018</u>
Time Analyzed: <u>0945</u>

	IS4 AREA	RT	IS5 AREA	RT	IS6 AREA	RT
12 HOUR STD	119431	9.59	132209	12.40	137251	14.60
UPPER LIMIT	238862	10.09	264418	12.90	274502	15.10
LOWER LIMIT	59716	9.09	66105	11.90	68626	14.10
EPA SAMPLE NO.						
ESNQ2DL	111661	9.59	118230	12.40	137363	14.60
ESNQ3DL	121797	9.59	119944	12.40	133910	14.60
			l	L	I	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab	Name:	Shealy Env	ironmen	ital Servic	es, Inc.		
Lab	Code:	EQI	Case	No.: <u>4</u>	7927		
Ana	lytica	l Method	:S'	VOA			
EPA	Sample	e No.:	SSTD	020YH			
Inst	rument	t ID:Agile	nt_MS	D12	·····	<u> </u>	
GC (	Column	Zebron ZB	-SV	ID:	0.25	(	(mm )
Heat	ed Pu	rge: (Y/1	N)				

Contract: EP-W-14035
MA No.: SDG No.: ESNP2
Level:
Lab File ID (Standard):12110215
Init. Calib. Date(s): 11/01/2018 11/01/2018
Date Analyzed: <u>11/02/2018</u>
Time Analyzed: 1523

	IS1 AREA	RT	152 AREA	RT	IS3 AREA	RT
12 HOUR STD	28561	5.78	134376	6.83	72463	8.32
UPPER LIMIT	57122	6.28	268752	7.33	144926	8.82
LOWER LIMIT	14281	5.28	67188	6.33	36232	7.82
EPA SAMPLE NO.						
ESNP4	28357	5.78	128743	6.83	71210	8.32
ESNP5	31643	5.78	145003	6.83	76071	8.32
ESNP6	28271	5.78	132504	6.83	77260	8.32
ESNP7	25368	5.78	120560	6.83	71421	8.32
ESNP8	29429	5.78	132209	6.83	76366	8.32
ESNQ0	32391	5.78	150562	6.83	80559	8.32
ESNQ1	29099	5.78	130487	6.83	72429	8.32
ESNP6MSD	29816	5.78	136620	6.83	76547	8.32
ESNP6MS	26741	5.78	120595	6.83	67080	8.32
					·	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: <u>EQI</u> Case No.: <u>47927</u>	
Analytical Method:SVOA	
EPA_Sample_No.:SSTD020YH	
Instrument ID: <u>Agilent_MSD12</u>	
GC Column:Zebron ZB-SV ID: 0.25	( mm )
Heated Purge: (Y/N)	

Contract: <u>EP-W-14035</u>	
MA No.: SDG No.: ESNP2	
Level: Low	
Lab File ID (Standard):12110215	
Init. Calib. Date(s): <u>11/01/2018</u> <u>1</u>	1/01/2018
Date Analyzed: <u>11/02/2018</u>	
Time Analyzed: 1523	a ·

	IS4 AREA	RT	IS5 AREA	RT	IS6 AREA	RT
12 HOUR STD	139819	9.59	133324	12.40	137550	14.60
UPPER LIMIT	279638	10.09	266648	12.90	275100	15.10
LOWER LIMIT	69910	9.09	66662	11.90	68775	14.10
EPA SAMPLE NO.						
ESNP4	128612	9.59	148329	12.40	171133	14.60
ESNP5	126939	9.59	133942	12.40	167047	14.60
ESNP6	139651	9.59	155770	12.41	194858	14.61
ESNP7	136717	9.59	145978	12.40	177362	14.61
ESNP8	140281	9.59	147972	12.41	175889	14.60
ESNQO	137908	9.60	167987	12.41	194261	14.62
ESNQ1	138669	9.60	161204	12.41	191879	14.61
ESNP6MSD	138615	9.59	146032	12.41	179372	14.60
ESNP6MS	125418	9.59	136584	12.40	169072	14.60
					L	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Na	ame: <u>S</u>	healy Env	ironmer	ital Serv	/ices, In	с.	_
Lab Co	ode: <u>E</u>	QI	Case	No.:	47927		-
Analyt	cical	Method	:S	VOA			-
EPA Sa	ample	No.:	SSTD	020YR		··· ··	<b>-</b>
Instru	ument	ID: Agile	ent_MS	D12			-
GC Col	Lumn:Z	Lebron ZB-	-SV	ID	: <u>0.25</u>		(mm)
Heated	d Purg	re: (Y/1	N) (N				_

Contract: EP-W-14035
MA No.: SDG No.: ESNP2
Level: Low
Lab File ID (Standard): 12110819
Init. Calib. Date(s): 11/01/2018 11/01/2018
Date Analyzed: <u>11/08/2018</u>
Time Analyzed: 1705

	IS1 AREA	RT	1SŻ AREA	RT	1S3 AREA	RT
12 HOUR STD	23560	5.78	111637	6.83	58613	8.32
UPPER LIMIT	47120	6.28	223274	7.33	117226	8.82
LOWER LIMIT	11780	5.28	55819	6.33	29307	7.82
EPA SAMPLE NO.	11700	0.20	55615	0.33	2,5307	7.02
ESNP2	16978	5.78	78612	6.83	46929	8.3L
ESNP3	23956	5.78	110339	6.83	62619	8.31
			220000		02019	0.91
				· · · · · · · · · · · · · · · · · · ·		· /
•						

IS1 = 1,4-Dichlorobenzene-d4 IS2 = Naphthalene-d8 IS3 = Acenaphthene-d10 AREA UPPER LIMIT = 200% internal standard area AREA LOWER LIMIT = 50% internal standard area RT UPPER LIMIT = + 0.50 minutes of internal standard RT RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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Lab Name: Shealy Environmental Services, Inc.	
Lab Code: EQI Case No.: 47927	
Analytical Method:SVOA	
EPA Sample No.:SSTD020YR	
Instrument ID: Agilent MSD12	
GC Column: Zebron ZB-SV ID: 0.25	( mm )
Heated Purge: (Y/N)	

Contract: EP-W-14035	
MA No.:SDG No.:ESNP	2
Level:Low	
Lab File ID (Standard):12110819	
Init. Calib. Date(s): 11/01/2018	11/01/2018
Date Analyzed: <u>11/08/2018</u>	
Time Analyzed: 1705	

	IS4 AREA	RT	IS5 AREA	RT	IS6 AREA	RT
12 HOUR STD	126628	9.59	139329	12.39	145935	14.59
UPPER LIMIT	253256	10.09	278658	12.89	291870	15.09
LOWER LIMIT	63314	9.09	69665	11.89	72968	14.09
EPA SAMPLE NO.						
ESNP2	89781	9.59	107984	12.39	129780	14.59
ESNP3	112390	9.59	130332	12.39	161972	14.59
			l			
				<u> </u>		

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12
AREA UPPER LIMIT = 200% internal standard area
AREA LOWER LIMIT = 50% internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Form 8A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP2

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: SVOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.3 (g/mL)	Lab File ID: 12110820
% Solids: 25.4	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed: <u>11/08/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types: GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	260	U
100-52-7	Benzaldehyde	1300	U
108-95-2	Phenol	1300	U
111-44-4	Bis(2-Chloroethyl) ether	1300	U
95-57-8	2-Chlorophenol	660	U
95-48-7	2-Methylphenol	1300	U
108-60-1	2,2'-Oxybis(1-chloropropane)	1300	U
98-86-2	Acetophenone	350	J
106-44-5	3-Methylphenol + 4-Methylphenol	1300	U
621-64-7	N-Nitroso-di-n propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
111-91-1	bis(2-Chloroethoxy)methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
91-20-3	Naphthalene	120	J
106-47-8	4-Chloroaniline	1300	U
87-68-3	Hexachlorobutadiene	660	U
105-60-2	Caprolactam	1300	U
59-50-7	4-Chloro-3-methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclo-pentadiene	1300	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	660	U
92-52-4	1,1'-Biphenyl	660	U

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### EPA SAMPLE NO. ESNP2

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Lab Code: EQI Case No.: 47927 Analytical Method: SVOA Matrix: Soil Sample wt/vol: 30.3 (g/mL) 9 % Solids: 25.4 GC Column: Zebron ZB-SV ID: 0.25 (mm) GC Column: ID: (mm) Extract Concentrated: (Y/N) Y Soil Aliquot (VOA): (uL) Heated Purge: (Y/N) Purge Volume: (mL) Cleanup Types: GPC

Concentration Units (ug/L, mg/L, ug/Kg):

Contract: EP-W-14035	
MA No.: SDG No.:	
Level: LOW	
Lab Sample ID:	
Lab File ID: <u>12110820</u>	
Date Received: 10/24/2018	
Date Extracted: 10/24/2018	
Date Analyzed:	
Extract Volume: 500 (	11T,)
Extraction Type: SONC	
Injection Volume: 1.0	(uL)
pH: Dilution Factor: 1.0	
Cleanup Factor: 2	
ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	660	U
131-11-3	Dimethylphthalate	660	U
606-20-2	2,6-Dinitrotoluene	660	U
208-96-8	Acenaphthylene	170	J
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	120	J
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	120	J
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
95-94-3	1,2,4,5-Tetrachlorobenzene	660	U
7005-72-3	4-Chlorophenyl-phenyl ether	660	U
86-73-7	Fluorene	220	J
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
101-55-3	4-Bromophenyl-phenylether	660	U
86-30-6	N-Nitrosodiphenylamine	660	U
118-74-1	Hexachlorobenzene	660	U
1912-24-9	Atrazine	1300	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	630	J
120-12-7	Anthracene	240	J
86-74-8	Carbazole	1300	U
84-74-2	Di-n-butylphthalate	660	U
206-44-0	Fluoranthene	1600	

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP2 Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Level: LOW Lab Sample ID: TJ23060-009 Lab File ID: \_\_\_\_12110820 Date Received: 10/24/2018 Date Extracted: 10/24/2018 Date Analyzed: \_\_\_\_\_11/08/2018 Extract Volume: 500 (11T.) Extraction Type: SONC Injection Volume: <u>1.0</u> \_\_\_\_\_ (uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 Cleanup Factor: 2 ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

Lab Name: Shealy Environmental Services, Inc.

GC Column: Zebron ZB-SV ID: 0.25 (mm)

GC Column:\_\_\_\_\_ ID:\_\_\_\_ (mm)

Soil Aliquot (VOA): \_\_\_\_\_ (uL)

Extract Concentrated: (Y/N) Y

Heated Purge: (Y/N)\_\_\_\_\_

Case No.: **47927** 

30.3 (g/mL) 9

\_\_\_\_\_(mL)

Lab Code: EQI

Sample wt/vol:

% Solids: 25.4

Purge Volume:\_\_\_\_\_

Cleanup Types: GPC

Matrix: Soil

Analytical Method: SVOA

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	1200	
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)anthracene	740	
218-01-9	Chrysene	970	
117-81-7	bis(2-Ethylhexyl)phthalate	170	J
117-84-0	Di-n-octylphthalate	1300	U
205-99-2	Benzo(b)fluoranthene	. 1300	
207-08-9	Benzo(k)fluoranthene	460	J
50-32-8	Benzo(a)pyrene	820	
193-39-5	Indeno(1,2,3-cd)pyrene	590	J
53-70-3	Dibenzo(a,h)anthracene	660	U .
191-24-2	Benzo(q,h,i)perylene	660 600	JBU
58-90-2	2,3,4,6-Tetrachlorophenol	660	U

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### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNP2

Lab Name: Shealy Environme	ental Services, Inc.	Contract: EP-W-14	035	
Lab Code: EQI C.	ase No.: 47927	MA No.:	SDG No.: ES	NP2
Analytical Method: SV		Level: LOW		
Matrix: Soil		Lab Sample ID: T	J23060-009	
Sample wt/vol: 30	.3 (a/mī,) a	Lab File ID:1		
% Solids: 25.4		Date Received:		
GC Column: Zebron ZB-SV	ID: 0.25 (mm)	Date Extracted:		
Extract Concentrated:		Date Analyzed:		
				(uL)
Soil Aliquot (VOA):		Extract Volume:		(uu)
Heated Purge: (Y/N)		Extraction Type:_		
Purge Volume:	(mL)	Injection Volume.		
Cleanup Types: <u>GPC</u>		pH: Diluti	on Factor: <u>1.0</u>	
Concentration Units (u	.g/L, ug/Kg): <u>ug/kg</u>	Cleanup Factor: 2		
CAS NUMBER	COMPOUND NAME	RI	EST. CONC.	Q
01				
02 Unkn	uwii-01	9.	40 1000	J
03				
04				
05Unkn	own-02	10.	26 2600	J
06 Unkn	own-03	10.	43 660	J
	own-04	11.		
	own-05	12.		1
	own-06	12.		
	xacosanol	12.		
	lene	13.		
	own-07	13.		
	xadecanol	14.		
	own-08	14.		
	own-09	14.		
	own-10 own-11	<u> </u>	······································	
	own-12	15.		1
	cosanoic acid, methyl este			
	own-13	16.		
	own-14	16.		
	own-15	16.		
	own-16	16.	1	1
	own-17	17.		
	own-18	17.		
·····	own-19	17.		
	a,6b,8a,11,12,14b-Octameth	lyl-1,4,4a 18.	09 1500	NJ
2813952-76-6 Lup-	20(29)-en-28-ol	18.	33 710	NJ

<sup>2</sup>EPA-designated Registry Number.

Unknown-20

Unknown-21

Total Alkanes

E966796<sup>2</sup>

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J

J

J

19.75

20.71

N/A

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNP3

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.: ESNP2	
Analytical Method: SVOA		Level: LOW		
Matrix: Soil		Lab Sample ID:	TJ23060-010	
Sample wt/vol: 30.2 (g/mL)			.12110821	
% Solids: <u>38.1</u>		Date Received:	10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25	(mm)	Date Extracted:	10/24/2018	
GC Column: ID: (	mm)	Date Analyzed: _	11/08/2018	
Extract Concentrated: (Y/N) Y		Extract Volume:	500	(uL)
Soil Aliquot (VOA): (	uL)	Extraction Type:	SONC	
Heated Purge: (Y/N)		Injection Volume	e:1.0	(uL)
Purge Volume: (	mL)	pH: Dilut	tion Factor: <u>1.0</u>	
Cleanup Types: <u>GPC</u>		Cleanup Factor:	2	
Concentration Units (ug/L, mg/L, ug/K	g):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	170	U
100-52-7	Benzaldehyde	860	U
108-95-2	Phenol	860	U
111-44-4	Bis(2-Chloroethyl) ether	860	U
95-57-8	2-Chlorophenol	440	U
95-48-7	2-Methylphenol	860	U
108-60-1	2,2'-Oxybis(1-chloropropane)	860	U
98-86-2	Acetophenone	860	U
106-44-5	3-Methylphenol + 4-Methylphenol	860	U
621-64-7	N-Nitroso-di-n propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
91-20-3	Naphthalene	210	J
106-47-8	4-Chloroaniline	860	Ú
87-68-3	Hexachlorobutadiene	440	U
105-60-2	Caprolactam	860	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	160	J
77-47-4	Hexachlorocyclo-pentadiene	860	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	440	U
92-52-4	1,1'-Biphenyl	440	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP3

Lab Name:       Shealy Environmental Services, Inc.       Contract:       EP-W-14035	
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ESNP2
Analytical Method:	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.2 (g/mL)	
% Solids: 38.1	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	440	U
131-11-3	Dimethylphthalate	440	U
606-20-2	2,6-Dinitrotoluene	440	U
208-96-8	Acenaphthylene	97	J
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	89	J
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	130	J
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
95-94-3	1,2,4,5-Tetrachlorobenzene	440	U
7005-72-3	4-Chlorophenyl-phenyl ether	440	U
86-73-7	Fluorene	150	J
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
101-55-3	4-Bromophenyl-phenylether	440	U
86-30-6	N-Nitrosodiphenylamine	440	U
118-74-1	Hexachlorobenzene	440	U
1912-24-9	Atrazine	860	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	490	
120-12-7	Anthracene	170	J
86-74-8	Carbazole	860	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	970	. <u></u>

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP3

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.2 (g/mL)	
% Solids: 38.1	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm	n) Date Extracted: 10/24/2018
GC Column: ID: (mm	Date Analyzed: <u>11/08/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL	) Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume:(uL)
Purge Volume: (mL	) pH: Dilution Factor: 1.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg)	: ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	760	
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	860	U
56-55-3	Benzo(a)anthracene	490	
218-01-9	Chrysene	640	
117-81-7	bis(2-Ethylhexyl)phthalate	79	J
117-84-0	Di-n-octylphthalate	860	U
205-99-2	Benzo(b)fluoranthene	900	
207-08-9	Benzo(k)fluoranthene	310	J
50-32-8	Benzo(a)pyrene	620	
193-39-5	Indeno(1,2,3-cd)pyrene	510	
53-70-3	Dibenzo(a,h)anthracene	440	U ·
191-24-2	Benzo(q,h,i)perylene	530	В
58-90-2	2,3,4,6-Tetrachlorophenol	440	U

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\_\_\_\_\_

Contract: EP-W-14035

EPA SAMPLE NO.

ESNP3

Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Method		Level: L	.OW		
Matrix: Soil		Lab Sample		060-010	
	30.2 (g/mL) g	Lab File ID		0821	
% Solids: 38.1		Date Receiv		4/2018	-
	ZB-SV ID: 0.25 (mm)	Date Extrac			
Particular and a second s	ted: (Y/N) Y	Date Analyz			
		Extract Vol			(uL)
	(uL)				(all)
-	N)	Extraction			
	(mL)	Injection Vo			
Cleanup Types: <u>G</u>		pH:			
Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	tor: <u>2</u>		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01					
02	Unknown-01		10.26	3500	J
03					
04	Unknown-02		12.03		J
05	Unknown-03		12.82		J
06	Unknown-04		12.96	660	J
07 7683-64-9	Supraene		13.61	990	NJ
08					
09 <u>192-97-2</u>	Benzo[e]pyrene		14.13	630	NJ
10	Unknown-05		14.34	390	J
11 <u>198-55-0</u>	Perylene		14.41	390	NJ
12	Unknown-06		14.71		J
13	Unknown-07		14.99	480	J
14			15 50	110	
15	Unknown-08		15.52		J
16516-95-0	Epicholestanol		15.84		NJ
17	Unknown-09 Unknown-10		16.31 16.67	<u>680</u> 390	J J
			16.75	1600	J
19 20	Unknown-11 Unknown-12		16.88	510	J
21	Unknown-13		16.98	570	J
22 83-47-6	.gammaSitosterol		17.30	4800	NJ
23	Unknown-14	i	17.40	1400	J
24 19466-47-8	Stigmastanol		17.44	3200	NJ
25	Unknown-15		17.57	2700	J
26	Unknown-16		17.81	810	J
27	Unknown-17		18.64	670	J
28	Unknown-18		19.74	2900	J
29	Unknown-19		20.29	590	J
30					
	Unknown-20	1	20.72	1600	J

<sup>2</sup>EPA-designated Registry Number.

Lab Name: Shealy Environmental Services, Inc.

Form 1B-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP4

Lab Name: Shealy Environmental Services, Inc. Conta		Contract: EP-W-14035	
Lab Code: EQI Case No.: 47927		MA No.: SDG No.:_ESN	P2
Analytical Met	hod: SVOA	Level: LOW	
Matrix: Soil		Lab Sample ID: TJ23060-011	
		Lab File ID:12110219	
% Solids: 42		Date Received: 10/24/2018	
GC Column: Zeb	ron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018	
GC Column:	ID: (mm)	Date Analyzed: <u>11/02/2018</u>	
	trated: (Y/N) Y	Extract Volume: 500	(uL)
	VOA):(uL)	Extraction Type: SONC	
	(Y/N)	Injection Volume: <u>1.0</u>	(uL)
Purge Volume:		pH: Dilution Factor: 5.0	#******
Cleanup Types:	GPC	Cleanup Factor: 2	
	Units (ug/L, mg/L, ug/Kg):	ug/kg	
	T		
CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	780	U
100-52-7	Benzaldehyde	3800	U
108-95-2	Phenol	3800	U
111-44-4	Bis(2-Chloroethyl) ether	3800	U
95-57-8	2-Chlorophenol	2000	U
95-48-7	2-Methylphenol	3800	U
108-60-1	2,2'-Oxybis(1-chloropropane	) 3800	U
98-86-2	Acetophenone	3800	U
106-44-5	3-Methylphenol + 4-Methylph	enol 3800	U
621-64-7	N-Nitroso-di-n propylamine	2000	U
67-72-1	Ilexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
91-20-3	Naphthalene	1900	JD
106-47-8	4-Chloroaniline	630	JD
87-68-3	Hexachlorobutadiene	2000	U
105-60-2	Caprolactam	3800	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	940	JD
77-47-4	Hexachlorocyclo-pentadiene		U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	2000	U
92-52-4	1,1'-Biphenyl	260	JD

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP4

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035
Lab Code: EQI Case No.: 47927		MA No.: SDG No.: _ESNP2
Analytical Method: SVOA		Level: LOW
Matrix: Soil		Lab Sample ID:
Sample wt/vol: 30.5 (g/mL) 9	· · · · · · · · · · · · · · · · · · ·	Lab File ID: 12110219
% Solids: 42.4		Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25	( mm )	Date Extracted: 10/24/2018
GC Column: ID:	(mm)	Date Analyzed: <u>11/02/2018</u>
Extract Concentrated: (Y/N) Y		Extract Volume: 500 (uL)
Soil Aliquot (VOA):	(uL)	Extraction Type: SONC
Heated Purge: (Y/N)		Injection Volume: <u>1.0</u> (uL)
Purge Volume:	(mL)	pH: Dilution Factor: 5.0
Cleanup Types:GPC		Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/	′Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	2000	, U
606-20-2	2,6-Dinitrotoluene	2000	U
208-96-8	Acenaphthylene	1300	JD
99-09-2	3-Nitroaniline	3800	U
83-32-9	Acenaphthene	300	JD
51-28-5	2,4-Dinitrophenol	3800	U
100-02-7	4-Nitrophenol	3800	U
132-64-9	Dibenzofuran	790	JD
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	2000	U
7005-72-3	4-Chlorophenyl-phenyl ether	2000	U
86-73-7	Fluorene	590	JD
100-01-6	4-Nitroaniline	3800	U
534-52-1	4,6-Dinitro-2-methylphenol	3800	U
101-55-3	4-Bromophenyl-phenylether	2000	U
86-30-6	N-Nitrosodiphenylamine	2000	U
118-74-1	Hexachlorobenzene	2000	U
1912-24-9	Atrazine	3800	U
87-86-5	Pentachlorophenol	3800	U
85-01-8	Phenanthrene	4300	D
120-12-7	Anthracene	1800	JD
86-74-8	Carbazole	540	JD
84-74-2	Di-n-butylphthalate	2000	U
206-44-0	Fluoranthene	8600	D

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNP4

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-	14035	
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.: ESNP2	
Analytical Method: SVOA		Level: LOW		
Matrix: Soil		Lab Sample ID:_	TJ23060-011	
Sample wt/vol: 30.5 (g/mL)				<u> </u>
% Solids:42.4		Date Received: _	10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25 (	mm )	Date Extracted:	10/24/2018	
GC Column: ID: (r	mm )	Date Analyzed: _	11/02/2018	
Extract Concentrated: (Y/N) Y		Extract Volume:	500	(uL)
Soil Aliquot (VOA):()	uL)	Extraction Type	: SONC	
Heated Purge: (Y/N)	<u></u>	Injection Volum	e:1.0	(uL)
Purge Volume: (r	mL)	pH: Dilu	tion Factor: <u>5.0</u>	
Cleanup Types: <u>GPC</u>		Cleanup Factor:	2	
Concentration Units (ug/L, mg/L, ug/Kg	g):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	7700	D
85-68-7	Butylbenzylphthalate	2000	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)anthracene	5400	D
218-01-9	Chrysene	6600	D
117-81-7	bis(2-Ethylhexyl)phthalate	630	JD
117-84-0	Di-n-octylphthalate	3800	U
205-99-2	Benzo(b)fluoranthene	9300	D
207-08-9	Benzo(k)fluoranthene	3400	D
50-32-8	Benzo(a)pyrene	6100	D
193-39-5	Indeno(1,2,3-cd)pyrene	4400	D
53-70-3	Dibenzo(a,h)anthracene	2000	U
191-24-2	Benzo(q,h,i)perylene	4100	DB
58-90-2	2,3,4,6-Tetrachlorophenol	2000	U

Form 1A-OR

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EPA SAMPLE NO.

ESNP4

Lab Name: Shealy E	Environmental Services, Inc.	Contract: EP-W-140	35	
Lab Code: EQI	Case No.: 47927	MA No.:		IP2
Analytical Metho		Level: LOW		
Matrix: Soil		Lab Sample ID:	23060-011	
	<b>30.5</b> (g/mL) g	Lab File ID:12	110219	
& Solids • 424	(y)	Date Received:		
	n ZB-SV ID: 0.25 (mm)	Date Extracted: 1		
	cated: (Y/N) Y	Date Analyzed:		
		Extract Volume:		(uL)
	DA):(uL)	Extract volume:	SONC	(ull)
	[/N)	Extraction Type:		
	(mL)	Injection Volume:		
Cleanup Types:	GPC	pH: Dilutio	on Factor: <u>5.0</u>	
Concentration Un	nits (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Factor: 2		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1			×	
2	Unknown-01	10.0	1 1800	JD
3				
1	Unknown-02	10.1	3 2500	JD
5	Unknown-03	10.4	4 1700	JD
5	Unknown-04	11.2	9 780	JD
243-17-4	11H-Benzo[b]fluorene	11.3	6 990	NJ D
32381-21-7	Pyrene, 1-methyl-	11.5	3 1000	NJ D
)				
479-79-8	11H-Benzo[a]fluoren-11-o			
	Unknown-05	12.0		
2	Unknown-06	12.5		
3 1000305-22-4	1H-Benz[f]indene, 2-phen			
1	Unknown-07	13.1		
5	Unknown-08	13.5		
ő	Unknown-09	13.5		
7	Unknown-10	13.7		
	Unknown-11	13.8		J D NJ D
9 <u>198-55-0</u> 0192-97-2	Perylene Benzo[e]pyrene	14.1		NJ D
1	Unknown-12	14.6		JD
2	Unknown-13	15.0		JD
3		10.0		
4	Unknown-14	15.5	5 1200	JD
5	Unknown-15	16.1		JD
6 	Unknown-16	17.4		JD
7	Unknown-17	17.5		
8				
9				
0				
E966796 <sup>2</sup>	Total Alkanes	N/	A 6800	J

<sup>2</sup>EPA-designated Registry Number.

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EFA SAMELE NU.

ESNP5

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035
Lab Code: EQI Case No.: 47927		MA No.: SDG No.:_ESNP2
Analytical Method: SVOA		Level:
Matrix: Soil		Lab Sample ID:
Sample wt/vol: 30.2 (g/mL)		Lab File ID:12110220
% Solids:67.0		Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25	( mm )	Date Extracted: 10/24/2018
GC Column: ID:	(mm)	Date Analyzed: 11/02/2018
Extract Concentrated: (Y/N) Y		Extract Volume: 500 (uL)
Soil Aliquot (VOA):	(uL)	Extraction Type: SONC
Heated Purge: (Y/N)		Injection Volume: <u>1.0</u> (uL)
Purge Volume:	(mL)	pH: Dilution Factor: 5.0
Cleanup Types: <u>GPC</u>		Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/	Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	500	U
100-52-7	Benzaldehyde	2400	U
108-95-2	Phenol	2400	U
111-44-4	Bis(2-Chloroethyl) ether	2400	U
95-57-8	2-Chlorophenol	1300	U
95-48-7	2-Methylphenol	2400	U
108-60-1	2,2'-Oxybis(1-chloropropane)	2400	U .
98-86-2	Acetophenone	2400	U
106-44-5	3-Methylphenol + 4-Methylphenol	2400	U
621-64-7	N-Nitroso-di-n propylamine	1300	U
67-72-1	Hexachloroethane	1300	U
98-95-3	Nitrobenzene	1300	U
78-59-1	Isophorone	. 1300	U
88-75-5	2-Nitrophenol	1300	U
105-67-9	2,4-Dimethylphenol	1300	U
111-91-1	bis(2-Chloroethoxy)methane	1300	U
120-83-2	2,4-Dichlorophenol	1300	U
91-20-3	Naphthalene	460	JD
106-47-8	4-Chloroaniline	2400	U
87-68-3	Hexachlorobutadiene	1300	U
105-60-2	Caprolactam	2400	U
59-50-7	4-Chloro-3-methylphenol	1300	U
91-57-6	2-Methylnaphthalene	520	JD
77-47-4	Hexachlorocyclo-pentadiene	2400	U
88-06-2	2,4,6-Trichlorophenol	1300	U
95-95-4	2,4,5-Trichlorophenol	1300	U
92-52-4	1,1'-Biphenyl	1300	U

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP5

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID: TJ23060-012
Sample wt/vol: 30.2 (g/mL)	Lab File ID: 12110220
% Solids: 67.0	Date Received:10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 5.0
Cleanup Types: <u>GPC</u>	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	1300	U
606-20-2	2,6-Dinitrotoluene	1300	U
208-96-8	Acenaphthylene	470	JD
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	1300	U
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	270	JD
121-14-2	2,4-Dinitrotoluene	1300	U
84-66-2	Diethylphthalate	1300	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1300	U
7005-72-3	4-Chlorophenyl-phenyl ether	1300	U
86-73-7	Fluorene	1300	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
101-55-3	4-Bromophenyl-phenylether	1300	U
86-30-6	N-Nitrosodiphenylamine	1300	U
118-74-1	Hexachlorobenzene	1300	U
1912-24-9	Atrazine	2400	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	2600	D
120-12-7	Anthracene	590	JD
86-74-8	Carbazole	330	JD
84-74-2	Di-n-butylphthalate	1300	U
206-44-0	Fluoranthene	3800	D

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP5

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ESNP2
Analytical Method: SVOA	Level:LOW
Matrix: Soil	Lab Sample ID: TJ23060-012
Sample wt/vol: 30.2 (g/mL)	
% Solids: 67.0	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed: 11/02/2018
Extract Concentrated: (Y/N) Y	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 5.0
Cleanup Types: GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	3600	D
85-68-7	Butylbenzylphthalate	1300	U
91-94-1	3,3'-Dichlorobenzidine	2400	U
56-55-3	Benzo(a)anthracene	2900	D
218-01-9	Chrysene	3400	D
117-81-7	bis(2-Ethylhexyl)phthalate	1300	U
117-84-0	Di-n-octylphthalate	2400	U
205-99-2	Benzo(b)fluoranthene	4800	D
207-08-9	Benzo(k)fluoranthene	1900	D
50-32-8	Benzo(a)pyrene	3100	D
193-39-5	Indeno(1,2,3-cd)pyrene	2500	D
53-70-3	Dibenzo(a,h)anthracene	1300	U
191-24-2	Benzo(q,h,i)perylene	2400	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1300	U

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EPA SAMPLE NO.

ESNP5

Lab Name: Shealy En	nvironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Method	d: SVOA	Level:			
Matrix: Soil		Lab Sample		060-012	
Sample wt/vol:	30.2 (g/mL) g	Lab File ID			
% Solids: 67.0	· · · ·	Date Receiv	ed: 10/2	4/2018	
GC Column: Zebron	ZB-SV ID: 0.25 (mm)	Date Extrac	ted: 10/2	24/2018	
Extract Concentra	ated: (Y/N) Y	Date Analyz	ed:11/0	2/2018	
Soil Aliquot (VOA	A): (uL)	Extract Vol			(uL)
	/N)	Extraction			
	(mL)	Injection V			
Cleanup Types:		рН:	Dilution	Factor: <u>5.0</u>	
	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		9.01	2800	JD
02	Unknown-02		9.35	790	JD
03	Unknown-03		9.41		
04	Unknown-04		9.74		
05 610-48-0	Anthracene, 1-methyl-		10.01		
06107426-38-0	Naphtho[2,3-b]norbornadie	ene	10.04	1100	NJ D
07 08 779-02-2	Anthracene, 9-methyl-	······	10.12	1400	NJ D
09	Unknown-05		10.44	780	1
10	Unknown-06		10.55	850	
11 238-84-6	11H-Benzo[a]fluorene		11.28	570	NJ D
1282-05-3	7H-Benz[de]anthracen-7-or	ne	11.90	600	NJ D
13243-46-9	Benzo[b]naphtho[2,3-d]thiophene		12.05	1500	NJ D
14 479-79-8	11H-Benzo[a]fluoren-11-or	ne	12.18	560	
15	Unknown-07		12.51	510	
16	Unknown-08		12.62	680	
17 <u>1000305-22-4</u> 18	1H-Benz[f]indene, 2-pheny Unknown-09	<u>ут-</u>	<u>12.97</u> 13.50	<u>1100</u> 650	NJ D J D
19	Unknown-10		13.76	680	JD
20 192-97-2	Benzo[e]pyrene		14.15	1100	NJD
21	Unknown-11		14.27	720	JD
22198-55-0	Perylene		14.43	3000	NJ D
23 205-82-3	Benzo[j]fluoranthene		14.64	1400	NJ D
24	Unknown-12		16.13	860	JD
25 213-46-7	Picene		16.81	710	NJ D
26					
27					
28 29					·
30	<u> </u>				
E966796 <sup>2</sup>	Total Alkanes		N/A	790	J
	1 100011 111301100				- 1

<sup>2</sup>EPA-designated Registry Number.

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: _SVOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol: 30.3(g/mL)	Lab File ID: 12110221		
% Solids: 51.5	Date Received:10/24/2018		
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018		
GC Column: ID: (mm)	Date Analyzed:		
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: SONC		
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)		
Purge Volume: (mL)	pH: Dilution Factor: 5.0		
Cleanup Types:GPC	Cleanup Factor: 2		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	640	U
100-52-7	Benzaldehyde	3200	U
108-95-2	Phenol	3200	U
111-44-4	Bis(2-Chloroethyl) ether	3200	U
95-57-8	2-Chlorophenol	1600	U
95-48-7	2-Methylphenol	3200	U
108-60-1	2,2'-Oxybis(1-chloropropane)	3200	U
98-86-2	Acetophenone	3200	. N
106-44-5	3-Methylphenol + 4-Methylphenol	3200	U
621-64-7	N-Nitroso-di-n propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
91-20-3	Naphthalene	700	JD
106-47-8	4-Chloroaniline	3200	U
87-68-3	Hexachlorobutadiene	1600	U
105-60-2	Caprolactam	3200	U
59-50-7	4-Chloro-3-methylphenol	1600	U
91-57-6	2-Methylnaphthalene	490	JD
77-47-4	Hexachlorocyclo-pentadiene	3200	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	1600	U
92-52-4	1,1'-Biphenyl	1600	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6

Lab Name: Shealy Environmental Services, Inc.	Contract
Lab Code: EQI Case No.: 47927	MA No.:_
Analytical Method: SVOA	Level: _
Matrix: Soil	Lab Samp
Sample wt/vol:30.3(g/mL)	Lab File
% Solids: 51.5	Date Rec
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Ext
GC Column: ID: (mm)	Date Ana
Extract Concentrated: (Y/N) Y	Extract V
Soil Aliquot (VOA): (uL)	Extractio
Heated Purge: (Y/N)	Injection
Purge Volume: (mL)	pH:
Cleanup Types: GPC	Cleanup
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

Contract: EP-W-14035	
MA No.: SDG No.: _ESNP2	
Level: LOW	
Lab Sample ID:	
Lab File ID:12110221	
Date Received: 10/24/2018	
Date Extracted: 10/24/2018	
Date Analyzed: <u>11/02/2018</u>	
Extract Volume: 500	(111,)
Extraction Type: SONC	
Injection Volume: <u>1.0</u>	(uL)
pH: Dilution Factor: 5.0	
Cleanup Factor: 2	
ua/ka	

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
208-96-8	Acenaphthylene	1200	JD
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	250	JD
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	430	JD
121-14-2	2,4-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1600	U
7005-72-3	4-Chlorophenyl-phenyl ether	1600	U
86-73-7	Fluorene	190	JD
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
101-55-3	4-Bromophenyl-phenylether	1600	U
86-30-6	N-Nitrosodiphenylamine	1600	U
118-74-1	Hexachlorobenzene	1600	U
1912-24-9	Atrazine	3200	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	1700	D
120-12-7	Anthracene	1400	JD
86-74-8	Carbazole	590	JD
84-74-2	Di-n-butylphthalate	1600	U
206-44-0	Fluoranthene	9500	D

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: SVOA	Level:LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:30.3 (g/mL)	Lab File ID: 12110221		
% Solids:51.5	Date Received:		
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018		
GC Column: ID: (mm)	Date Analyzed: <u>11/02/2018</u>		
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: SONC		
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)		
Purge Volume: (mL)	pH: Dilution Factor: 5.0		
Cleanup Types: GPC	Cleanup Factor: 2		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	11000	D
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	5900	D
218-01-9	Chrysene	9100	D
117-81-7	bis(2-Ethylhexyl)phthalate	1600	U
117-84-0	Di-n-octylphthalate	3200	. N
205-99-2	Benzo(b)fluoranthene	14000	D
207-08-9	Benzo(k)fluoranthene	18000	D
50-32-8	Benzo(a)pyrene	7800	D
193-39-5	Indeno(1,2,3-cd)pyrene	6400	D
53-70-3	Dibenzo(a,h)anthracene	2000	D
191-24-2	Benzo(q,h,i)perylene	5700	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1600	U

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EPA SAMPLE NO.

ESNP6

	Lab Name: Shealy Er	nvironmental Services, Inc.	Contract:	EP-W-14035		
		Case No.: 47927			DG No.: ESN	JP2
	Analytical Method		Level:			
	Matrix: Soil	··· Restaur	Lab Sample		.060-013	
		30.3 (g/mL) <b>g</b>	Lab File II			
	% Solids: 51.5		Date Receiv			
	GC Column: Zebron	ZB-SV ID: 0.25 (mm)	Date Extra			
	Extract Concentra		Date Analyz			
		A): (uL)	Extract Vol			(uL)
		/N)	Extraction			-
		(mL)	Injection V			
			_			
	Cleanup Types:		pH:		Factor: <u>5.5</u>	
	Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	ctor: <u>2</u>		
]	CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01		Unknown-01		10.62	1700	JD
02		Unknown-02		10.78	1600	JD
03		Unknown-03		10.84	1600	JD
04	1210-12-4	9-Anthracenecarbonitrile	· · · · · · · · · · · · · · · · · · ·	11.11	740	NJ D
05	33543-31-6	Fluoranthene, 2-methyl-		11.16	780	NJ D
06	1	Unknown-04		11.26	890	JD
07	243-17-4	11H-Benzo[b]fluorene		11.28	770	NJ D
08	3442-78-2	Pyrene, 2-methyl-		11.41	1200	NJ D
09		Unknown-05		11.53	980	JD
10	2381-21-7	Pyrene, 1-methyl-		11.56	770	NJ D
11	481-74-3	9,10-Anthracenedione, 1,8-dihydr	roxy-3-me	11.74	1300	NJ D
12	479-79-8	11H-Benzo[a]fluoren-11-on	e	11.90	920	NJ D
13	239-35-0	Benzo[b]naphtho[2,1-d]thiophene		12.06	1900	NJ D
14	27208-37-3	Cyclopenta[cd]pyrene		12.13	8 <sup>.</sup> 60	NJ D
15	80252-14-8	6H-Benz[de]anthracen-6-on	e	12.18	810	NJ D
16	480-39-7	4H-1-Benzopyran-4-one, 2,3-dihyd	dro-5,7-d	12.29	830	NJ D
17		Unknown-06		12.72	700	JD
18	1705-84-6	Triphenylene, 2-methyl-		12.97	650	NJ D
	1090-13-7	5,12-Naphthacenedione		13.04	790	NJ D
20	50861-05-7	9H-Cyclopenta[a]pyrene		13.18	710	NJ D
21		Unknown-07		13.50	1100	JD
22		Unknown-08		13.63	1500	JD
23		Unknown-09		13.75	2200	JD
	192-97-2	Benzo[e]pyrene		14.15	2000	NJ D
25	198-55-0	Perylene		14.65	3800	NJ D
26	1000294-14-8	Benzoxazole, 2-[2-(4-piperidyl)p	pyrimid-5	15.85	1300	NJ D

<sup>2</sup>EPA-designated Registry Number.

Unknown-10

Unknown-11

Unknown-12

Total Alkanes

Stigmast-4-en-3-one

27

28

29

301058-61-3

E966796<sup>2</sup>

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2000

1300

1400

6100

JD

JD

JD

NJ D

16.39

17.42

18.56

18.68

N/A

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6MS

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ESNP2
Analytical Method: SVOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.4 (g/mL)	Lab File ID: 12110222
% Solids: 51.5	Date Received:
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume:(mL)	pH: Dilution Factor: 5.0
Cleanup Types: <u>GPC</u>	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	640	U
100-52-7	Benzaldehyde	3200	U
108-95-2	Phenol	2200	JD
111-44-4	Bis(2-Chloroethyl) ether	3200	U
95-57-8	2-Chlorophenol	2100	D
95-48-7	2-Methylphenol	3200	U
108-60-1	2,2'-Oxybis(1-chloropropane)	3200	U
98-86-2	Acetophenone	3200	U
106-44-5	3-Methylphenol + 4-Methylphenol	3200	U
621-64-7	N-Nitroso-di-n propylamine	2100	D
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U · *.
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
91-20-3	Naphthalene	460	JD
106-47-8	4-Chloroaniline	3200	U
87-68-3	Hexachlorobutadiene	1600	U
105-60-2	Caprolactam	3200	U
59-50-7	4-Chloro-3-methylphenol	2300	D
91-57-6	2-Methylnaphthalene	450	JD
77-47-4	Hexachlorocyclo-pentadiene	3200	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	1600	U
92-52-4	1,1'-Biphenyl	1600	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6MS

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035	
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2	
Analytical Method: SVOA	Level:LOW	
Matrix: Soil	Lab Sample ID:	
Sample wt/vol:30.4(g/mL)9	Lab File ID: 12110222	
% Solids:51.5	Date Received:10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018	
GC Column: ID: (mm)	Date Analyzed:11/02/2018	
Extract Concentrated: (Y/N) Y	Extract Volume: <u>500</u> (uL)	
Soil Aliquot (VOA): (uL)	Extraction Type: SONC	
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)	
Purge Volume: (mL)	pH: Dilution Factor: 5.0	
Cleanup Types: GPC	Cleanup Factor: 2	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
208-96-8	Acenaphthylene	1100	JD
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	2100	D
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	2300	JD
132-64-9	Dibenzofuran	380	JD
121-14-2	2,4-Dinitrotoluene	2100	D
84-66-2	Diethylphthalate	1600	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1600	U
7005-72-3	4-Chlorophenyl-phenyl ether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
101-55-3	4-Bromophenyl-phenylether	1600	U
86-30-6	N-Nitrosodiphenylamine	1600	U
118-74-1	Hexachlorobenzene	1600	U
1912-24-9	Atrazine	3200	U
87-86-5	Pentachlorophenol	2600	JD
85-01-8	Phenanthrene	1400	JD
120-12-7	Anthracene	1100	JD
86-74-8	Carbazole	580	JD
84-74-2	Di-n-butylphthalate	1600	U
206-44-0	Fluoranthene	4600	D

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# ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6MS

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.: ESNP2	
Analytical Method: SVOA		Level: LOW		
Matrix: Soil		Lab Sample ID:	TJ23060-013MS	
Sample wt/vol: 30.4(g/mL) _9				
% Solids: <u>51.5</u>		Date Received: _	10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25	(mm)	Date Extracted:	10/24/2018	
GC Column: ID:	(mm)	Date Analyzed:_	11/02/2018	
Extract Concentrated: (Y/N) Y		Extract Volume:	500	(uL)
Soil Aliquot (VOA):	(uL)	Extraction Type:	SONC	
Heated Purge: (Y/N)		Injection Volume	e: <u>1.0</u>	'(uL)
Purge Volume:	(mĹ)	pH: Dilut	tion Factor: <u>5.0</u>	
Cleanup Types:GPC		Cleanup Factor:	2	
	/ \			

Concentration Units (ug/L, mg/L, ug/Kg):

r.

ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	7000	D
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	3400	D
218-01-9	Chrysene	5800	D
117-81-7	bis(2-Ethylhexyl)phthalate	1600	Ŭ
117-84-0	Di-n-octylphthalate	3200	U
205-99-2	Benzo(b)fluoranthene	10000	D
207-08-9	Benzo(k)fluoranthene	2900	D
50-32-8	Benzo(a)pyrene	5300	D
193-39-5	Indeno(1,2,3-cd)pyrene	5100	D.
53-70-3	Dibenzo(a,h)anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	4500	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1600	U

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6MSD

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
"Sample"wt/vol: <u> </u>	
% Solids:51.5	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed: 11/02/2018
Extract Concentrated: (Y/N) Y	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 5.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	650	U
100-52-7	Benzaldehyde	3200	υ
108-95-2	Phenol	1800	JD
111-44-4	Bis(2-Chloroethyl) ether	3200	U
95-57-8	2-Chlorophenol	1600	JD
95-48-7	2-Methylphenol	3200	υ
108-60-1	2,2'-Oxybis(1-chloropropane)	3200	U
98-86-2	Acetophenone	3200	U
106-44-5	3-Methylphenol + 4-Methylphenol	3200	U
621-64-7	N-Nitroso-di-n propylamine	1700	D
67-72-1	Hexachloroethane	1700	U
98-95-3	Nitrobenzene	1700	U
78-59-1	Isophorone	1700	U
88-75-5	2-Nitrophenol	1700	U
105-67-9	2,4-Dimethylphenol	1700	U
111-91-1	bis(2-Chloroethoxy)methane	1700	U
120-83-2	2,4-Dichlorophenol	1700	U
91-20-3	Naphthalene	420	JD
106-47-8	4-Chloroaniline	3200	U
87-68-3	Hexachlorobutadiene	1700	Ŭ
105-60-2	Caprolactam	3200	U
59-50-7	4-Chloro-3-methylphenol	2000	D
91-57-6	2-Methylnaphthalene	400	JD
77-47-4	Hexachlorocyclo-pentadiene	3200	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	1700	U
92-52-4	1,1'-Biphenyl	1700	U

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6MSD

Lab Name: Shealy Environmental Services, Inc.	Contract:
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method:SVOA	Level: LOW
Matrix: Soil	_ Lab Sample ID:
Sample wt/vol: 30.0 (g/mL) 9	Lab File ID: 12110223
% Solids:51.5	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm	) Date Extracted: 10/24/2018
GC Column: ID: (mm	) Date Analyzed: <u>11/02/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: (uL)
Soil Aliquot (VOA): (uL	) Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume:(uL)
Purge Volume:(mL	) pH: Dilution Factor: 5.0
Cleanup Types: GPC	_ Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1700	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethylphthalate	1700	U
606-20-2	2,6-Dinitrotoluene	1700	U
208-96-8	Acenaphthylene	1000	JD
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	1800	D
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	1900	JD
132-64-9	Dibenzofuran	350	JD
121-14-2	2,4-Dinitrotoluene	1800	D
84-66-2	Diethylphthalate	1700	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1700	U
7005-72-3	4-Chlorophenyl-phenyl ether	1700	U
86-73-7	Fluorene	1700	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
101-55-3	4-Bromophenyl-phenylether	1700	U
86-30-6	N-Nitrosodiphenylamine	1700	U
118-74-1	Hexachlorobenzene	1700	U
1912-24-9	Atrazine	3200	U
87-86-5	Pentachlorophenol	2200	JD
85-01-8	Phenanthrene	1300	JD
120-12-7	Anthracene	1100	JD
86-74-8	Carbazole	470	JD
84-74-2	Di-n-butylphthalate	1700	U
206-44-0	Fluoranthene	4000	D

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNP6MSD

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID: TJ23060-013MD
Sample wt/vol: 30.0 (g/mL) 9	Lab File ID: 12110223
% Solids:51.5	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 5.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	7500	D
85-68-7	Butylbenzylphthalate	1700	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	3100	D
218-01-9	Chrysene	6200	D
117-81-7	bis(2-Ethylhexyl)phthalate	1700	U
117-84-0	Di-n-octylphthalate	3200	U
205-99-2	Benzo(b)fluoranthene	10000	D
207-08-9	Benzo(k)fluoranthene	3000	D
50-32-8	Benzo(a)pyrene	5800	D
193-39-5	Indeno(1,2,3-cd)pyrene	5500	D
53-70-3	Dibenzo(a,h)anthracene	1700	U
191-24-2	Benzo(q,h,i)perylene	4500	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1700	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP7

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ ESNP2		
Analytical Method: SVOA	Level:LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:30.3(g/mL)	Lab File ID: 12110224		
% Solids: 72.6	Date Received:10/24/2018		
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018		
GC Column: ID: (mm)	Date Analyzed:		
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: SONC		
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)		
Purge Volume: (mL)	pH: Dilution Factor: 5.0		
Cleanup Types:GPC	Cleanup Factor: 2		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	460	U
100-52-7	Benzaldehyde	2300	U
108-95-2	Phenol	2300	U
111-44-4	Bis(2-Chloroethyl) ether	2300	U
95-57-8	2-Chlorophenol	. 1200	U
95-48-7	2-Methylphenol	2300	U
108-60-1	2,2'-Oxybis(1-chloropropane)	2300	U
98-86-2	Acetophenone	2300	U
106-44-5	3-Methylphenol + 4-Methylphenol	2300	U
621-64-7	N-Nitroso-di-n propylamine	1200	U
67-72-1	Hexachloroethane	1200	U
98-95-3	Nitrobenzene	1200	U
78-59-1	Isophorone	1200	U
88-75-5	2-Nitrophenol	1200	U
105-67-9 '	2,4-Dimethylphenol	1200	U
111-91-1	bis(2-Chloroethoxy)methane	1200	U
120-83-2	2,4-Dichlorophenol	1200	U
91-20-3	Naphthalene	1000	JD
106-47-8	4-Chloroaniline	2300	U
87-68-3	Hexachlorobutadiene	1200	U
105-60-2	Caprolactam	2300	U
59-50-7	4-Chloro-3-methylphenol	1200	U
91-57-6	2-Methylnaphthalene	1000	JD
77-47-4	Hexachlorocyclo-pentadiene	2300	U
88-06-2	2,4,6-Trichlorophenol	1200	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	160	JD

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## EPA SAMPLE NO. ESNP7

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Lab Code: EQI Case No.: 47927 Analytical Method: SVOA Matrix: Soil Sample wt/vol: 30.3 (g/mL) 9 % Solids: 72.6 GC Column: Zebron ZB-SV ID: 0.25 (mm) GC Column: \_\_\_\_\_ID: (mm) Extract Concentrated: (Y/N) Y Soil Aliquot (VOA): \_\_\_\_\_ (uL) Heated Purge: (Y/N) Purge Volume: \_\_\_\_\_ (mL) Cleanup Types: GPC

Concentration Units (ug/L, mg/L, ug/Kg):

Contract: EP-W-14035	
MA No.: SDG No.: _ ESNP2	
Level: LOW	
Lab Sample ID:	
Lab File ID:12110224	
Date Received: 10/24/2018	
Date Extracted: 10/24/2018	
Date Analyzed: <u>11/02/2018</u>	
Extract Volume: 500	(uL)
Extraction Type: SONC	
Injection Volume: 1.0	(uL)
pH: Dilution Factor: 5.0	
Cleanup Factor: 2	
ua/ka	

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	1200	U
606-20-2	2,6-Dinitrotoluene	1200	U
208-96-8	Acenaphthylene	720	JD
99-09-2	3-Nitroaniline	2300	U
83-32-9	Acenaphthene	290	JD
51-28-5	2,4-Dinitrophenol	2300	U
100-02-7	4-Nitrophenol	2300	U
132-64-9	Dibenzofuran	480	JD
121-14-2	2,4-Dinitrotoluene	1200	U
84-66-2	Diethylphthalate	1200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1200	U
7005-72-3	4-Chlorophenyl-phenyl ether	1200	U
86-73-7	Fluorene	260	JD
100-01-6	4-Nitroaniline	2300	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
101-55-3	4-Bromophenyl-phenylether	1200	U
86-30-6	N-Nitrosodiphenylamine	1200	U
118-74-1	Hexachlorobenzene	1200	U
1912-24-9	Atrazine	2300	U
87-86-5	Pentachlorophenol	2300	U
85-01-8	Phenanthrene	2700	D
120-12-7	Anthracene	900	JD
86-74-8	Carbazole	420	JD
84-74-2	Di-n-butylphthalate	1200	U
206-44-0	Fluoranthene	5000	D

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP7

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2		
Analytical Method: SVOA	Level: LOW		
Matrix: Soil	Lab Sample ID: <b>TJ23060-014</b>		
Sample wt/vol: 30.3 (g/mL)			
% Solids: 72.6	Date Received:10/24/2018		
GC Column: Zebron ZB-SV ID: 0.25 (m	m) Date Extracted: 10/24/2018		
GC Column: ID: (m	m) Date Analyzed: <u>11/02/2018</u>		
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)		
Soil Aliquot (VOA): (u	L) Extraction Type: SONC		
Heated Purge: (Y/N)	Injection Volume: (uL)		
Purge Volume: (mi	L) pH: Dilution Factor: 5.0		
Cleanup Types:GPC	Cleanup Factor: 2		
Concentration Units (ug/L, mg/L, ug/Kg)	: ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	5000	D
85-68-7	Butylbenzylphthalate	1200	U
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)anthracene	4000	 D
218-01-9	Chrysene	5500	 D
117-81-7	bis(2-Ethylhexyl)phthalate	130	JD
117-84-0	Di-n-octylphthalate	2300	U
205-99-2	Benzo(b)fluoranthene	8700	D
207-08-9	Benzo(k)fluoranthene	2800	D
50-32-8	Benzo(a)pyrene	5900	D
193-39-5	Indeno(1,2,3-cd)pyrene	4400	 D
53-70-3	Dibenzo(a,h)anthracene	1200	U
191-24-2	Benzo(q,h,i)perylene	4200	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1200	U

Form 1A-OR

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EPA SAMPLE NO.

ESNP7

Lab Name: Shealy Er	vironmental Services, Inc.	Contract:E	P-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	G No.: ESN	IP2
Analytical Method		Level: L			
Matrix: Soil		Lab Sample		060-014	
Sample wt/vol:	30.3 (g/mL) g	Lab File ID			
% Solids: 72.6		Date Receiv			a
GC Column: Zebron	ZB-SV ID: 0.25 (mm)	Date Extrac			
Extract Concentra	ated: (Y/N) Y	Date Analyz			
	(uL)	Extract Vol			(uL)
	'N)	Extraction '			-
	, (mL)	Injection Vo			
Cleanup Types:		рН:			
	ts (ug/L, ug/Kg):ug/kg_	Cleanup Fac			
		creanup rac			
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		4.07	5300	JD
02	Unknown-02		4.31	3700	JD
03	Unknown-03		9.01	3000	JD
04 <u>949-41-7</u>	1H-Cyclopropa[1]phenanthrene,1a	a,9b-dihyd	10.12	1400	NJ D
05 06 243-17-4	1111 Danga [b] f] yanana		11 20	E 2 0	
07	11H-Benzo[b]fluorene		11.29	520	NJ D
08 479-79-8	11H-Benzo[a]fluoren-11-or	ne	11.90	480	NJ D
09	Unknown-04		12.05	1200	JD
10	Unknown-05		12.62	610	JD
11	Unknown-06		13.50	740	JD
12	Unknown-07		13.63	1300	JD
13	Unknown-08		13.76	1100	JD
14 205-82-3	Benzo[j]fluoranthene		14.15	1800	NJ D
15 16 192-97-2	Unknown-09		14.28	1000	
17 198-55-0	Benzo[e]pyrene Perylene		14.43 14.65	7300 2300	NJ D NJ D
18 148-03-8	.betaTocopherol		14.93	7600	
19	••••••••••••••••••••••••••••••••••••••				
20	Unknown-10		15.55	980	JD
21	Unknown-11		16.14	1100	JD
22	Unknown-12		16.39	920	JD
23213-46-7	Picene		16.82	1600	NJ D
24	Unknown-13		16.90	1500	JD
25	Unknown-14		18.58	2300	JD
26 27	Unknown-15 Unknown-16		<u>18.68</u> 18.74	<u>1700</u> 1600	J D J D
28 20475-86-9	Urs-12-en-24-oic acid, 3-oxo-,	methyl es	19.31	5100	NJ D
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A	3500	J

<sup>2</sup>EPA-designated Registry Number.

Form 1B-OR

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EPA SAMPLE NO. ESNP8

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: ESNP2 Level: LOW Analytical Method: SVOA Matrix: Soil Lab Sample ID: TJ23060-015 Sample wt/vol: \_\_\_\_\_ 30.4 (g/mL) g Lab File ID: 12110225 % Solids: 70.2 Date Received: \_\_\_\_\_10/24/2018 GC Column: Zebron ZB-SV ID: 0.25 (mm) Date Extracted: 10/24/2018 GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: \_\_\_\_\_11/02/2018 Extract Concentrated: (Y/N) Y Extract Volume: 500 (uL) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: SONC Heated Purge: (Y/N)\_\_\_\_\_ Injection Volume: 1.0 \_\_\_\_\_ (uL) Purge Volume:\_\_\_\_\_ \_\_\_\_\_ (mL) pH: \_\_\_\_\_ Dilution Factor: 5.0 Cleanup Types:\_\_\_\_GPC\_\_\_\_ Cleanup Factor: 2 Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	470	U
100-52-7	Benzaldehyde	2300	U
108-95-2	Phenol	2300	U
111-44-4	Bis(2-Chloroethyl) ether	2300	U
95-57-8	2-Chlorophenol	1200	U
95-48-7	2-Methylphenol	2300	U
108-60-1	2,2'-Oxybis(1-chloropropane)	2300	U
98-86-2	Acetophenone	2300	U
106-44-5	3-Methylphenol + 4-Methylphenol	2300	U
621-64-7	N-Nitroso-di-n propylamine	1200	U
67-72-1	Hexachloroethane	1200	U
98-95-3	Nitrobenzene	1200	U
78-59-1	Isophorone	1200	U
88-75-5	2-Nitrophenol	1200	U
105-67-9	2,4-Dimethylphenol	1200	U
111-91-1	bis(2-Chloroethoxy)methane	1200	U
120-83-2	2,4-Dichlorophenol	1200	U
91-20-3	Naphthalene	530	JD
106-47-8	4-Chloroaniline	2300	U
87-68-3	Hexachlorobutadiene	1200	U
105-60-2	Caprolactam	2300	U
59-50-7	4-Chloro-3-methylphenol	1200	U
91-57-6	2-Methylnaphthalene	720	JD
77-47-4	Hexachlorocyclo-pentadiene	2300	U
88-06-2	2,4,6-Trichlorophenol	1200	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	1200	U

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP8

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035	
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2	
Analytical Method: SVOA	Level:LOW	
Matrix: Soil	Lab Sample ID: TJ23060-015	
Sample wt/vol: 30.4 (g/mL)	Lab File ID: 12110225	
% Solids:70.2	Date Received: 10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018	
GC_Column:ID:(mm)	Date Analyzed: 11/02/2018	
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)	
Soil Aliquot (VOA): (uL)	Extraction Type: SONC	
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)	
Purge Volume:(mL)	pH: Dilution Factor: 5.0	
Cleanup Types:GPC	Cleanup Factor: 2	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	1200	U
606-20-2	2,6-Dinitrotoluene	1200	U
208-96-8	Acenaphthylene	230	JD
99-09-2	3-Nitroaniline	2300	U
83-32-9	Acenaphthene	2.80	JD
51-28-5	2,4-Dinitrophenol	2300	U
100-02-7	4-Nitrophenol	2300	U
132-64-9	Dibenzofuran	410	JD
121-14-2	2,4-Dinitrotoluene	1200	U
84-66-2	Diethylphthalate	1200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1200	U
7005-72-3	4-Chlorophenyl-phenyl ether	1200	U
86-73-7	Fluorene	340	JD
100-01-6	4-Nitroaniline	2300	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
101-55-3	4-Bromophenyl-phenylether	1200	U
86-30-6	N-Nitrosodiphenylamine	1200	U
118-74-1	Hexachlorobenzene	1200	U
1912-24-9	Atrazine	2300	U
87-86-5	Pentachlorophenol	2300	U
85-01-8	Phenanthrene	4500	D
120-12-7	Anthracene	970	JD
86-74-8	Carbazole	410	JD
84-74-2	Di-n-butylphthalate	1.200	U
206-44-0	Fluoranthene	4800	D

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNP8

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: SVOA	Level: LOW		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol: 30.4 (g/mL)	Lab File ID: 12110225		
% Solids: 70.2	Date Received:10/24/2018		
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018		
GC Column: ID: (mm)	Date Analyzed:		
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type:SONC		
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)		
Purge Volume: (mL)	pH: Dilution Factor: 5.0		
Cleanup Types:GPC	Cleanup Factor: 2		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	4300	D
85-68-7	Butylbenzylphthalate	1200	υ
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)anthracene	. 2700	D
218-01-9	Chrysene	3300	D
117-81-7	bis(2-Ethylhexyl)phthalate	140	JD
117-84-0	Di-n-octylphthalate	2300	U
205-99-2	Benzo(b)fluoranthene	3700	D
207-08-9	Benzo(k)fluoranthene	1200	D
50-32-8	Benzo(a)pyrene	2700	D
193-39-5	Indeno(1,2,3-cd)pyrene	1900	D
53-70-3	Dibenzo(a,h)anthracene	1200	U
191-24-2	Benzo(q,h,i)perylene	1900	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1200	U

Form 1A-OR

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Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035

EPA SAMPLE NO.

ESNP8

Lab Code: EQI	Case No.: 47927	MA No.:	SI	G No.: ESN	IP2
Analytical Method	: SVOA	Level:	LOW		
Matrix: Soil		Lab Sample		060-015	
	30.4 (.g/mL) g	Lab File II			
% Solids: 70.2		Date Receiv			
	ZB-SV ID: 0.25 (mm)	Date Extrac			······
Extract Concentra		Date Analyz			
		Extract Vol			(uL)
	):(uL)				(\dd)
	N)	Extraction			
	(mL)	Injection V			
Cleanup Types: <u> </u>		pH:	Dilution	Factor: <u>5.0</u>	
Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	ctor: 2	·	
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		4.06	2800	JD
n2	Unknown-02		4.31	1800	J D
03	Unknown-03		9.01	2500	JD
04	Unknown-04		9.87	4300	JD
05	Unknown-05		9.94	1300	JD
06 <u>613-12-7</u>	Anthracene, 2-methyl-		10.01	940	NJ D
07 <u>610-48-0</u>	Anthracene, 1-methyl-	NI	10.04	1400	
08 <u>14905-56-7</u>	Tetradecane, 2,6,10-trime	thyl- Hilkan	e 10.09	850	NJ DU
09 <u>2531-84-2</u>	Phenanthrene, 2-methyl-		10.12	1600	NJ D
10	Unknown-06		10.44	1300	
11 629-92-5	Nonadecane Alkane		11.20	520	
12243-17-4	11H-Benzo[b]fluorene		11.28	650	NJ D
13	Unknown-07		11.36	680	JD
142381-21-7	Pyrene, 1-methyl-		11.41	610	NJ D
15	Unknown-08		11.56	500	JD
16481-74-3	9,10-Anthracenedione, 1,8-dihydr	toxy-3-me	11.74	1300	
17	Unknown-09		12.05	1400	
18	Unknown-10		12.18	520	JD
19 20	Unknown-11	·	13.09	590	JD
21	Unknown-12		13.18	580	JD
22	Unknown-13		13.63	810	JD
23 198-55-0	Perylene		14.15	650	NJ D
24 192-97-2	Benzo[e]pyrene		14.43	2400	NJ D
25	Denzolejbyrene		11.10	2400	
26214-17-5	Benzo[b]chrysene		16.82	910	NJ D
27	Unknown-14		16.89	1000	JD
28	Unknown-15		18.66	1100	JD
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A	1600	J

<sup>2</sup>EPA-designated Registry Number.

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ESNP9

Lab Name: She	aly Environmental Services, Inc.		Contract:	EP-W-14035	
Lab Code: EQI	Case No.: 47927		MA No.:	SDG No.: ESN	P2
Analytical Me	thod: SVOA		Level:	LOW	
Matrix: Soil				e ID: TJ23060-016	
	:30.1 (g/mL)_9			ID: 12110116	
% Solids: 7	77.6		Date Recei	_ved: 10/24/2018	
	bron ZB-SV ID: 0.25			acted: 10/24/2018	
GC Column:	ID:	(mm)	4	yzed: 11/01/2018	
					(uL)
Extract Concentrated: (Y/N) Y				(u)	
	(VOA):			Type: SONC	
	(Y/N)			Volume: 1.0	(uL)
Purge Volume:		(mL)	рН:	Dilution Factor: <u>1.0</u>	
Cleanup Types	: GPC		Cleanup Fa	actor: 2	
	Units (ug/L, mg/L, ug	/Kg):	ug/kg		
CAS NO.	COMPOUND			CONCENTRATION	Q
123-91-1	1,4-Dioxane			86	U
100-52-7	Benzaldehyde			420	U
108-95-2	Phenol			420	U
111-44-4	Bis(2-Chloroethyl)	ether		420	U
95-57-8	2-Chlorophenol			220	U
95-48-7	2-Methylphenol			420	U
108-60-1	2,2'-Oxybis(1-chlor	opropane	e)	420	U
98-86-2	Acetophenone			420	U
106-44-5	3-Methylphenol + 4-	Methylph	nenol	420	U
621-64-7	N-Nitroso-di-n prop	ylamine		220	U
67-72-1	Hexachloroethane			220	U
98-95-3	Nitrobenzene			220	U
78-59-1	Isophorone			220	U
88-75-5	2-Nitrophenol			220	U
105-67-9	2,4-Dimethylphenol		······································	220	U
111-91-1	bis(2-Chloroethoxy)	methane		220	U .
120-83-2	2,4-Dichlorophenol	····		- 220	U
91-20-3	Naphthalene			220	U
106-47-8	4-Chloroaniline			420	U
87-68-3	Hexachlorobutadiene			220	U
105-60-2	Caprolactam			420 220	<u>ט</u> ט
59-50-7	4-Chloro-3-methylph	EIIOT			
91-57-6	2-Methylnaphthalene	todi		220	U
77-47-4 88-06-2	Hexachlorocyclo-pen 2,4,6-Trichlorophen			420 220	U U
95-95-4	2,4,5-Trichlorophen			220	U . U
92-52-4	1,1'-Biphenyl	0 L		220	U U
<u>92-32-4</u>	T T'T _DThuenAT			220	U

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP9

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.1 (g/mL)	Lab File ID: 12110116
% Solids:77.6	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:11/01/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	220	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	420	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	420	U
100-02-7	4-Nitrophenol	420	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
7005-72-3	4-Chlorophenyl-phenyl ether	220	U
86-73-7	Fluorene	220	U
100-01-6	4-Nitroaniline	420	U
534-52-1	4,6-Dinitro-2-methylphenol	420	U
101-55-3	4-Bromophenyl-phenylether	220	U
86-30-6	N-Nitrosodiphenylamine	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	420	U
87-86-5	Pentachlorophenol	420	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	220	U
206-44-0	Fluoranthene	82	J

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP9

Lab Name: Shealy Environmental Services, Inc. Contract			Contract:_	EP-W-1	4035		
Lab Code: EQI	Case No.: 47927		MA No.:		SDG No.:_	ESNP2	2
Analytical Meth	od: SVOA		Level:	LOW			
Matrix: Soil			Lab Sample	e ID:	TJ23060-016		
Sample wt/vol:_	30.1 (g/mL) g		Lab File I				
% Solids:77.6	3		Date Recei	ved: _	10/24/2018		
	on ZB-SV ID: 0.25		Date Extra	acted:	10/24/2018		
GC Column:	ID:	(mm)	Date Analy	zed:_	11/01/2018		
	rated: (Y/N) Y				500		(uL)
Soil Aliquot (V	OA):	(uL)	Extraction	. Туре:	SONC		
Heated Purge: (	Y/N)		Injection	Volume	e:1.0		_(uL)
Purge Volume:		(mL)	рН:	Dilut	ion Factor:	1.0	
Cleanup Types:_	GPC		Cleanup Fa	ctor:	2		
Concentration U	nits (ug/L, mg/L, ug,	/Kg):	ug/kg				
CAS NO.	COMPOUND			CON	CENTRATION		Q
129-00-0	Pyrene					74	J
85-68-7	Butylbenzylphthalate	2				220	U
91-94-1	3,3'-Dichlorobenzidi	.ne				420	U

56-55-3

218-01-9

117-81-7

117-84-0

205-99-2

207-08-9

50-32-8

193-39-5

53-70-3

191-24-2

58-90-2

Benzo(a) anthracene

Di-n-octylphthalate

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Indeno(1,2,3-cd)pyrene

Dibenzo(a,h)anthracene

2,3,4,6-Tetrachlorophenol

Benzo(q,h,i)perylene

Benzo(a)pyrene

bis(2-Ethylhexyl)phthalate

Chrysene

U U UBCV 12.10-18

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36

59

220

420

83

27

56

41

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220

220

J

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EPA SAMPLE NO.

ESNP9

Lab Name: Shealy	Environmental Services, Inc.	Contract: _	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Meth	lod: SVOA	Level:			
Matrix: Soil		Lab Sample		060-016	
Sample wt/vol:	30.1 (g/mL) g	Lab File ID	1211	0116	-
% Solids: 77.6	)	Date Receiv			
GC Column: Zebr	on ZB-SV ID: 0.25 (mm)	Date Extrac			
Extract Concent	rated: (Y/N) Y	Date Analyz			
	OA):(uL)	Extract Vol			(uL
		Extraction			
	Y/N) (mL)	Injection V			
		pH:			· · · · · · · · · · · · · · · · · · ·
	GPC			Factor: <u></u>	
Concentration l	nits (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	tor:		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
	Unknown-01		4.07	870	J
}	Unknown-02		4.31	730	J
	Unknown-03		4.47	270	J
	Unknown-04		9.88	2100	J
373-49-9	Palmitoleic acid		9.92	250	NJ
57-10-3	n-Hexadecanoic acid		9.94	370	NJ
	Unknown-05		10.60	99	J
	Unknown-06		11.51	170	J
)	Unknown-07		11.56	1100	J
481-74-3	9,10-Anthracenedione, 1,8-dihy	droxy-3-me	11.74	750	NJ
-	Unknown-08		12.04		J
2 518-82-1	9,10-Anthracenedione, 1,3,8-tr	ihydroxy-6	12.56		NJ
3	Unknown-09		12.70		J
1	Unknown-10		12.99	2200	J
-			12 (2	110	
5	Unknown-11 Unknown-12		13.63 14.84		J J
3			14.04		U
	Unknown-13		15.31	100	J
)	Unknown-14		16.78	1200	 J
· · · · · · · · · · · · · · · · · · ·	Unknown-15		17.01	800	J
83-46-5	.betaSitosterol		17.36	100	NJ
1615-91-4	A'-Neogammacer-22(29)-en	e	17.58	510	NJ
	Unknown-16		17.83	150	J
	Unknown-17		18.53	540	J
1058-61-3	Stigmast-4-en-3-one		18.66	800	NJ
3					
)				ļ	
)				<u> </u>	
E966796 <sup>2</sup>	Total Alkanes		N/A	480	J

 $^{2}\ensuremath{\text{EPA}}\xspace$  designated Registry Number.

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ESNQ0

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ESNP2 Lab Code: EQI Case No.: 47927 Analytical Method: SVOA Level: \_\_\_\_LOW Matrix: Soil Lab Sample ID: TJ23060-017 Sample wt/vol: \_\_\_\_\_\_ 30.4 (g/mL) \_\_\_\_\_ Lab File ID: \_\_\_\_12110226 % Solids: 67.7 Date Received: 10/24/2018 GC Column: Zebron ZB-SV ID: 0.25 (mm) Date Extracted: 10/24/2018 GC Column:\_\_\_\_\_ ID:\_\_\_\_\_ (mm) Date Analyzed: 11/02/2018 Extract Concentrated: (Y/N) Y Extract Volume: 500 (11T.) Soil Aliquot (VOA):\_\_\_\_\_ (uL) Extraction Type: SONC Heated Purge: (Y/N) Injection Volume: 1.0 \_\_\_\_\_(uL) (mL) Purge Volume:\_\_\_\_\_ pH: \_\_\_\_\_ Dilution Factor: 5.0 Cleanup Types: \_\_\_\_\_GPC\_\_\_\_\_ Cleanup Factor: 2 Concentration Units (ug/L, mg/L, ug/Kg): ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	490	U
100-52-7	Benzaldehyde	2400	U
108-95-2	Phenol	2400	U
111-44-4	Bis(2-Chloroethyl) ether	2400	U
95-57-8	2-Chlorophenol	1200	U
95-48-7	2-Methylphenol	2400	U
108-60-1	2,2'-Oxybis(1-chloropropane)	2400	U
98-86-2	Acetophenone	2400	U
106-44-5	3-Methylphenol + 4-Methylphenol	2400	U
621-64-7	N-Nitroso-di-n propylamine	1200	U
67-72-1	Hexachloroethane	1200	U
98-95-3	Nitrobenzene	1200	U
78-59-1	Isophorone	1200	U
88-75-5	2-Nitrophenol	1200	U
105-67-9	2,4-Dimethylphenol	1200	U
111-91-1	bis(2-Chloroethoxy)methane	1200	U
120-83-2	2,4-Dichlorophenol	1200	U
91-20-3	Naphthalene	4700	D
106-47-8	4-Chloroaniline	2400	U
87-68-3	Hexachlorobutadiene	1200	U
105-60-2	Caprolactam	2400	U
59-50-7	4-Chloro-3-methylphenol	1200	U
91-57-6	2-Methylnaphthalene	2400	D
77-47-4	Hexachlorocyclo-pentadiene	2400	U
88-06-2	2,4,6-Trichlorophenol	1200	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	590	JD

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ0

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-1	4035	
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.:ESNP2	
Analytical Method: SVOA		Level:LOW		
Matrix: Soil		Lab Sample ID:	TJ23060-017	
Sample wt/vol: 30.4 (g/mL)		Lab File ID:	12110226	
% Solids: 67.7		Date Received: _	10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25 (	(mm )	Date Extracted:	10/24/2018	
GC Column: ID: (:	mm)	Date Analyzed: _	11/02/2018	
Extract Concentrated: (Y/N) Y		Extract Volume:	500	(uL)
Soil Aliquot (VOA):(	uL)	Extraction Type:	SONC	
Heated Purge: (Y/N)		Injection Volume	e:1.0	_(uL)
Purge Volume: (1	mL)	pH: Dilut	tion Factor: <u>5.0</u>	
Cleanup Types:GPC	<u> </u>	Cleanup Factor:	2	
Concentration Units (ug/L, mg/L, ug/Ko	q):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	1200	U
606-20-2	2,6-Dinitrotoluene	1200	U
208-96-8	Acenaphthylene	1100	JD
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	550	JD
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	1400	D
121-14-2	2,4-Dinitrotoluene	1200	U
84-66-2	Diethylphthalate	1200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1200	U
7005-72-3	4-Chlorophenyl-phenyl ether	1200	U
86-73-7	Fluorene	610	JD
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
101-55-3	4-Bromophenyl-phenylether	1200	U
86-30-6	N-Nitrosodiphenylamine	340	JD
118-74-1	Hexachlorobenzene	1200	U
1912-24-9	Atrazine	2400	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	7700	D
120-12-7	Anthracene	2000	D
86-74-8	Carbazole	720	JD
84-74-2	Di-n-butylphthalate	1200	U
206-44-0	Fluoranthene	11000	D

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## EPA SAMPLE NO. ESNQO

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Lab Code: EQI Case No.: 47927 Analytical Method: SVOA Matrix: Soil Sample wt/vol: 30.4 (g/mL) 9 % Solids: 67.7 GC Column: Zebron ZB-SV ID: 0.25 (mm) GC Column: ID: (mm) Extract Concentrated: (Y/N) Y Soil Aliquot (VOA): (uL) Heated Purge: (Y/N) Purge Volume: (mL) Cleanup Types: GPC

Concentration Units (ug/L, mg/L, ug/Kg):

Contract: EP-W-14035	
MA No.: SDG No.: _ESNP2	
Level:LOW	
Lab Sample ID:	
Lab File ID:12110226	
Date Received:10/24/2018	
Date Extracted: 10/24/2018	
Date Analyzed:11/02/2018	
Extract Volume. 500	(11T,)
Extraction Type: SONC	
Injection Volume: <u>1.0</u>	(uL)
pH: Dilution Factor: 5.0	
Cleanup Factor: 2 ,	
ug/kg	

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	8700	D
85-68-7	Butylbenzylphthalate	1200	U
91-94-1	3,3'-Dichlorobenzidine	2400	U
56-55-3	Benzo(a)anthracene	6800	D
218-01-9	Chrysene	7300	D
117-81-7	bis(2-Ethylhexyl)phthalate	440	JD
117-84-0	Di-n-octylphthalate	2400	U
205-99-2	Benzo(b)fluoranthene	9800	D
207-08-9	Benzo(k)fluoranthene	3400	D
50-32-8	Benzo(a)pyrene	7900	D
193-39-5	Indeno(1,2,3-cd)pyrene	5000	D
53-70-3	Dibenzo(a,h)anthracene	1200	U
191-24-2	Benzo(q,h,i)perylene	4900	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1200	U

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EPA SAMPLE NO.

ESNQ0

Lab Name: Shealy En	vironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Method	: SVOA	Level:			
Matrix: Soil		Lab Sample		060-017	
	30.4 (g/mL) g	Lab File II			
% Solids: 67.7		Date Receiv			
	ZB-SV ID: 0.25 (mm)	Date Extrac			
Extract Concentra		Date Analyz			
	): (uL)	Extract Vol			(uL)
		Extraction		DNC	(u=)
	N *)	Injection V			
	(mL)	-			
Cleanup Types: <u>G</u>		рН:		Factor: <u>5.0</u>	
Concentration Uni	ts (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	ctor:		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01					
02					
03 581-42-0	Naphthalene, 2,6-dimethyl	-	7.96	1800	NJ D
04 581-40-8	Naphthalene, 2,3-dimethyl		8.04	1700	NJ D
05	Unknown-01		8.60	2100	JD
06					
07					
08832-69-9	Phenanthrene, 1-methyl-		10.04	2200	NJ D
09	Unknown-02		10.14	2000	JD.
10	Unknown-03		10.44	2600	JD
11	Unknown-04 Unknown-05		12.05 12.50	<u>1200</u> 550	J D J D
13	Unknown-06		12.50	860	JD
14 1705-84-6	Triphenylene, 2-methyl-		12.05	1300	NJ D
15	Unknown-07		13.22	540	JD
16	Unknown-08		13.50	660	JD
17	Unknown-09		13.59	2000	JD
18	Unknown-10		13.77	2400	JD
19	Unknown-11		13.97	1700	JD
20					

<sup>2</sup>EPA-designated Registry Number.

Unknown-13

Unknown-14

Unknown-15

Unknown-16

Total Alkanes

Benzo[e]pyrene

Benzo[j]fluoranthene

Benzo[b]triphenylene

21

23

24

25

26

28 29 30

22 205 - 82 - 3

27 215-58-7

E966796<sup>2</sup>

192-97-2

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2100

6000

2700

1600

1400

1400

1500

11000

JD

NJ D

NJ D

JD

JD

JD

NJ D

J

14.29

14.44

14.66

15.04

15.28

15.44

16.85

N/A

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ1

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-	14035	
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.:ESNP2	
Analytical Method: SVOA		Level: LOW		
Matrix: Soil		Lab Sample ID:	TJ23060-018	
Sample wt/vol:30.6(g/mL)_g_		Lab File ID:		
% Solids: 81.1		Date Received: _	10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25	( mm )	Date Extracted:	10/24/2018	
GC Column: ID:	(mm)	Date Analyzed: _	11/02/2018	
Extract Concentrated: (Y/N) Y		Extract Volume:	500	(uL)
Soil Aliquot (VOA):	(uL)	Extraction Type:	SONC	
Heated Purge: (Y/N)		Injection Volume	e:1.0	_(uL)
Purge Volume:	(mL)	pH: Dilut	tion Factor: <u>5.0</u>	
Cleanup Types:GPC	<u>.</u>	Cleanup Factor:	2	
Concentration Units (ug/L, mg/L, ug/	Ύκq):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	400	U
100-52-7	Benzaldehyde	2000	U
108-95-2	Phenol	2000	U
111-44-4	Bis(2-Chloroethyl) ether	2000	U
95-57-8	2-Chlorophenol	1000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-Oxybis(1-chloropropane)	2000	U
98-86-2	Acetophenone	2000	U
106-44-5	3-Methylphenol + 4-Methylphenol	2000	U
621-64-7	N-Nitroso-di-n propylamine	1000	U
67-72-1	Hexachloroethane	1000	U
98-95-3	Nitrobenzene	1000	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	1000	U
105-67-9	2,4-Dimethylphenol	1000	U
111-91-1	bis(2-Chloroethoxy)methane	1000	U
120-83-2	2,4-Dichlorophenol	1000	IJ
91-20-3	Naphthalene	1200	0
106-47-8	4-Chloroaniline	2000	U
87-68-3	Hexachlorobutadiene	1000	U
105-60-2	Caprolactam	2000	U
59-50-7	4-Chloro-3-methylphenol	1000	U
91-57-6	2-Methylnaphthalene	840	JD
77-47-4	Hexachlorocyclo-pentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	1000	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	170	JD

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## EPA SAMPLE NO. ESNQ1

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 MA No.: \_\_\_\_\_\_ SDG No.: \_ESNP2\_\_\_\_ Lab Code: EQI Case No.: 47927 Level: LOW Analytical Method: SVOA Matrix: Soil Sample wt/vol: 30.6 (g/mL) 9 Lab File ID: \_\_\_\_\_12110227 % Solids: 81.1 Date Received: \_\_10/24/2018 GC Column: Zebron ZB-SV ID: 0.25 (mm) Date Extracted: 10/24/2018 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) Date Analyzed: \_\_\_\_\_\_11/02/2018 Extract Concentrated: (Y/N) YExtract Volume: 500 (11T,) Soil Aliquot (VOA): \_\_\_\_\_ (uL) Extraction Type: SONC Heated Purge: (Y/N)\_\_\_\_\_ Injection Volume: 1.0 \_\_\_\_\_ (uL) (mL) pH: \_\_\_\_\_ Dilution Factor: 5.0 Purge Volume:\_\_\_\_\_ Cleanup Types: \_\_\_\_ GPC \_\_\_\_ Cleanup Factor: 2 ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	1000	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	1000	U
606-20-2	2,6-Dinitrotoluene	1000	U
208-96-8	Acenaphthylene	1100	D
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	520	JD
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	1300	D
121-14-2	2,4-Dinitrotoluene	1000	U
84-66-2	Diethylphthalate	1000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	U
7005-72-3	4-Chlorophenyl-phenyl ether	1000	U
86-73-7	Fluorene	920	JD
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	. 2000	U
101-55-3	4-Bromophenyl-phenylether	1000	U
86-30-6	N-Nitrosodiphenylamine	1000	U
118-74-1	Hexachlorobenzene	1000	U
1912-24-9	Atrazine	2000	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	17000	ΕD
120-12-7	Anthracene	3300	D
86-74-8	Carbazole	1700	JD
84-74-2	Di-n-butylphthalate	1000	U
206-44-0	Fluoranthene	22000	ΕD

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ1

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-	14035	
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.:ESNP	2
Analytical Method: SVOA		Level: LOW		
Matrix: Soil		Lab Sample ID:	TJ23060-018	
Sample wt/vol: 30.6 (g/mL) 9		Lab File ID:		
% Solids: 81.1		Date Received: _	10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25	( mm )	Date Extracted:	10/24/2018	
GC Column: ID:	(mm)	Date Analyzed: _	11/02/2018	
Extract Concentrated: (Y/N) Y		Extract Volume:	500	(uL)
Soil Aliquot (VOA):	(uL)	Extraction Type:	SONC	
Heated Purge: (Y/N)		Injection Volume	e:1.0	_ (uL)
Purge Volume:	(mL)	pH: Dilut	tion Factor: <u>5.0</u>	
Cleanup Types:GPC		Cleanup Factor:	2	
Concentration Units (ug/L, mg/L, ug/L	Kq):	ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	16000	D
85-68-7	Butylbenzylphthalate	1000	U
91-94-1	3,3'-Dichlorobenzidine	2000	IJ
56-55-3	Benzo(a)anthracene	9500	D
218-01-9	Chrysene	9800	D
117-81-7	bis(2-Ethylhexyl)phthalate	1000	U
117-84-0	Di-n-octylphthalate	2000	U
205-99-2	Benzo(b)fluoranthene	11000	D
207-08-9	Benzo(k)fluoranthene	4100	D
50-32-8	Benzo(a)pyrene	7900	D
193-39-5	Indeno(1,2,3-cd)pyrene	4500	D
53-70-3	Dibenzo(a,h)anthracene	1000	U
191-24-2	Benzo(q,h,i)perylene	3600	DB
58-90-2	2,3,4,6-Tetrachlorophenol	1000	U

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ1

Lab Name: Shealy E	nvironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Metho	d: SVOA	Level:	LOW		
Matrix: Soil		Lab Sample		060-018	
	30.6 (g/mL) g	Lab File II		0227	
% Solids: 81.1		Date Receiv		4/2018	
GC Column: Zebror		Date Extrac	·····		
Extract Concentr		Date Analyz			
	A):(uL)	Extract Vol	50		(uL)
				DNC	
	/N)	Extraction			
Purge Volume:	(mL)	Injection V			
Cleanup Types:		pH:		Factor: <u>5.0</u>	
Concentration Un	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	ctor: <u>2</u>		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		9.01	2500	JD
02	Unknown-02		9.35	1600	JD
03486-25-9	9H-Fluoren-9-one		9.43	3100	NJ D
042531-84-2	Phenanthrene, 2-methyl-		10.01	2200	NJD
05610-48-0	Anthracene, 1-methyl-		10.04	2600	NJ D
06	Unknown-03		10.13	3900	JD
07 5737-13-3	Cyclopenta(def)phenanthr	enone	10.62	1800	
08 <u>33543-31-6</u>	Fluoranthene, 2-methyl-		11.28	540	
09	Unknown-04		11.41	420	
10 80252-14-8	6H-Benz[de]anthracen-6-o:		11.90	460	
11239-35-0	Benzo[b]naphtho[2,1-d]thiophen	e	12.06	700	
12	Unknown-05		12.14	420	
13 82-05-3	7H-Benz[de]anthracen-7-0		12.18	<u>450</u> 670	
14 47 <sup>9</sup> -79-8 15	11H-Benzo[a]fluoren-11-o Unknown-06	ne	12.62 12.73	420	
16 2381-31-9	Benz[a]anthracene, 8-met	hul -	12.97	870	
17	Unknown-07	11 y ±	13.18	550	J D
18	Unknown-08		13.76		
19 192-97-2	Benzo[e]pyrene		14.16	2100	NJD
20198-55-0	Perylene		14.44	6300	NJ D
21	Unknown-09		14.65	2900	JD
22 213-46-7	Picene		16.83	1300	NJ D
23					
24					
25					
26					
27					
28					
29					

<sup>2</sup>EPA-designated Registry Number.

Total Alkanes

30

E966796<sup>2</sup>

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N/A

# ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

WU. DAMILUE INV.

ESNQ1DL

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: SVOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: (g/mL)	Lab File ID: 12110130
% Solids: 81.1	Date Received: <u>10/24/2018</u>
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:11/01/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume:(mL)	pH: Dilution Factor: 20.0
Cleanup Types: GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	1600	U
100-52-7	Benzaldehyde	8000	U
108-95-2	Phenol	8000	U
111-44-4	Bis(2-Chloroethyl) ether	8000	Ū
95-57-8	2-Chlorophenol	4100	U
95-48-7	2-Methylphenol	8000	Ū
108-60-1	2,2'-Oxybis(1-chloropropane)	8000	U
98-86-2	Acetophenone	8000	U
106-44-5	3-Methylphenol + 4-Methylphenol	8000	U
621-64-7	N-Nitroso-di-n propylamine	4100	U
67-72-1	Hexachloroethane	4100	U
98-95-3	Nitrobenzene	4100	U
78-59-1	Isophorone	4100	U
88-75-5	2-Nitrophenol	4100	U
105-67-9	2,4-Dimethylphenol	4100	U
111-91-1	bis(2-Chloroethoxy)methane	4100	U
120-83-2	2,4-Dichlorophenol	4100	IJ
91-20-3	Naphthalene	920	JD
106-47-8	4-Chloroaniline	8000	U
87-68-3	Hexachlorobutadiene	4100	U
105-60-2	Caprolactam	8000	U
59-50-7	4-Chloro-3-methylphenol	4100	U
91-57-6	2-Methylnaphthalene	670	JD
77-47-4	Hexachlorocyclo-pentadiene	8000	U
88-06-2	2,4,6-Trichlorophenol	4100	U
95-95-4	2,4,5-Trichlorophenol	4100	U
92-52-4	1,1'-Biphenyl	4100	U

Form 1A-OR

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FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NU.

ESNQ1DL

Lab Name: Shea	aly Environmental Services, Inc.		Contract: EP-W-14035
Lab Code: EQI Analytical Me	Case No.: 47927		MA No.: SDG No.: ESNP2 Level: LOW
Matrix: Soil			Lab Sample ID:
Sample wt/vol	:30.6 (g/mL)	• ·	Lab File ID:12110130
% Solids: 8	1.1		Date Received: 10/24/2018
	bron ZB-SV ID: 0.25		Date Extracted: 10/24/2018
GC Column:	ID:	(mm)	Date Analyzed:11/01/2018
	ntrated: (Y/N) Y		Extract Volume: 500 (uL
Soil Aliquot	(VOA):	(uL)	Extraction Type: SONC
	(Y/N)		Injection Volume: <u>1.0</u> (uL
			pH: Dilution Factor: 20.0
Cleanup Types			Cleanup Factor: 2
	Units (ug/L, mg/L, ug/	κg):	ug/kg
CAS NO.	COMPOUND		CONCENTRATION Q
91-58-7	2-Chloronaphthalene		4100 U
88-74-4	2-Nitroaniline		4100 U
131-11-3	Dimethylphthalate		4100 U
606-20-2	2,6-Dinitrotoluene		4100 U
208-96-8	Acenaphthylene		780 J D
99-09-2	3-Nitroaniline		U 0008
83-32-9	Acenaphthene		4100 U
51-28-5	2.4-Dinitrophenol		U 0008

2,4-Dinitrophenol

2,4-Dinitrotoluene

1,2,4,5-Tetrachlorobenzene

4,6-Dinitro-2-methylphenol

4-Bromophenyl-phenylether

N-Nitrosodiphenylamine

Hexachlorobenzene

Pentachlorophenol

Di-n-butylphthalate

Phenanthrene

Fluoranthene

Anthracene

Carbazole

4-Chlorophenyl-phenyl ether

Diethylphthalate

4-Nitroaniline

4-Nitrophenol

Dibenzofuran

Fluorene

Atrazine

51-28-5

100-02-7

132-64-9

121-14-2

84-66-2

95-94-3

86-73-7

100-01-6

534-52-1

101-55-3

86-30-6

118-74-1

87-86-5

85-01-8

120-12-7

86-74-8

84-74-2

206-44-0

1912-24-9

7005-72-3

Form 1A-OR

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8000

4100

4100

4100

4100

8000

8000

4100

4100

4100

8000

8000

13000

2400

1400

4100

15000

680

930

U

JD

U

U

U

U

JD

U

U

U

U

U

U

U

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JD

JD

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D

## FORM LA-OK ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

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ESNQ1DL

Lab Name: Sheal	y Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ESI	NP2	
Analytical Met	hod: SVOA	Level:	LOW		
Matrix: Soil		Lab Sample	ID:		
Sample wt/vol:	30.6 (g/mL) g		D: 12110130		
% Solids: 81.		Date Recei	ved: 10/24/2018		
	on ZB-SV ID: 0.25 (mm)	Date Extra	acted: 10/24/2018		
GC Column:	ID: (mm)		zed: 11/01/2018		
	trated: (Y/N) Y		500	. (uL)	
	VOA): (uL)		Type: SONC		
	(Y/N)(UI)		Volume: 1.0	(11T.)	-
	((mL)		Dilution Factor: 20.0		
Cleanup Types:			ctor: 2		-
	Jnits (ug/L, mg/L, ug/Kg):	ug/kg			-
CAS NO.	COMPOUND		CONCENTRATION	Q	
129-00-0	Pyrene		13000	D	
85-68-7	Butylbenzylphthalate		4100	U	
91-94-1	3,3'-Dichlorobenzidine		8000	U	
56-55-3	Benzo(a)anthracene		7500	D	1
218-01-9	Chrysene		7300	D	
117-81-7	bis(2-Ethylhexyl)phthalate		4100	U	
117-84-0	Di-n-octylphthalate		8000	U	
205-99-2	Benzo(b)fluoranthene		8400	D	
207-08-9	Benzo(k)fluoranthene		3200	JD	
50-32-8	Benzo(a)pyrene		6200	D	
193-39-5	Indeno(1,2,3-cd)pyrene		3800	JD	10
53-70-3	Dibenzo(a,h)anthracene		4100	U	act
191-24-2	Benzo(q,h,i)perylene		4100 3300	JDBU	12-10-18
58-90-2	2.3.4.6-Tetrachlorophenol		4100	TI	100

Form 1A-OR

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ1DL

Lab Name: Shealy En	nvironmental Services, Inc.	Contract:_	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	P2
Analytical Method	d: SVOA	Level:			
Matrix: Soil		Lab Sample	ID: TJ23	060-018	
Sample wt/vol:	<b>30.6</b> (g/mL) <b>g</b>	Lab File I			
% Solids: 81.1	30.6 (g/mL) g	Date Recei	ved: 10/2	4/2018	
	ZB-SV ID: 0.25 (mm)	Date Extra	cted: 10/2	4/2018	
Extract Concentra	ated: (Y/N) Y	Date Analy:			
	A):(uL)			0	(uL)
	/N)	Extraction			
	(mL)	Injection N			
	GPC			Factor: 20.0	
	its (ug/L, ug/Kg):ug/kg	Cleanup Fac			· · · · · · · · · · · · · · · · · · ·
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01					
02 486-25-9	9H-Fluoren-9-one		9.42	1800	NJ D
03	Unknown-01		10.01	1600	JD
04 610-48-0	Anthracene, 1-methyl-		10.04	2100	NJ D
05	Unknown-02		10.13	3200	JD
06239-35-0	Benzo[b]naphtho[2,1-d]thiophene		12.05		NJ D
07 198-55-0	Perylene		14.42	4800	NJ D
08	1				
09					
10					
11					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22	l			 	
23					
24					
25					
26					
28					
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A	2200	J
<sup>2</sup> EPA-designated Re					······································

Form 1B-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2 Contract: EP-W-14035 MA No.: \_\_\_\_\_ SDG No.: \_ ESNP2 Level: <u>LOW</u> TJ23060-019 Lab Sample ID: 12110131 Lab File ID: Date Received: 10/24/2018

% Solids: 82.9		Date Received: 10/24/2018	
GC Column: Zebron ZB-SV ID: 0.25	(mm)	Date Extracted: 10/24/2018	
GC Column: ID:	(mm)	Date Analyzed: <u>11/01/2018</u>	
Extract Concentrated: (Y/N) Y		Extract Volume: 500	(uL)
Soil Aliquot (VOA):	(uL)	Extraction Type: SONC	
Heated Purge: (Y/N)		Injection Volume: 1.0	(uL)
Purge Volume:	(mL)	pH: Dilution Factor: 20.0	
Cleanup Types:GPC		Cleanup Factor: 2	

ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

Lab Name: Shealy Environmental Services, Inc.

30.0

Case No.: 47927

(g/mL) **g** 

Lab Code: EQI

Matrix: Soil

Sample wt/vol:\_\_\_\_\_

Analytical Method: SVOA

82.9

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	1600	U
100-52-7	Benzaldehyde	8000	U
108-95-2	Phenol	8000	U
111-44-4	Bis(2-Chloroethyl) ether	8000	U
95-57-8	2-Chlorophenol	4100	U
95-48-7	2-Methylphenol	8000	U
108-60-1	2,2'-Oxybis(1-chloropropane)	8000	υ
98-86-2	Acetophenone	8000	U
106-44-5	3-Methylphenol + 4-Methylphenol	8000	U
621-64-7	N-Nitroso-di-n propylamine	4100	U
67-72-1	Hexachloroethane	4100	U
98-95-3	Nitrobenzene	4100	U
78-59-1	Isophorone	4100	U
88-75-5	2-Nitrophenol	4100	U
105-67-9	2,4-Dimethylphenol	4100	U
111-91-1	bis(2-Chloroethoxy)methane	4100	U
120-83-2	2,4-Dichlorophenol	4100	U
91-20-3	Naphthalene	12000	D
106-47-8	4-Chloroaniline	8000	U
87-68-3	Hexachlorobutadiene	4100	U
105-60-2	Caprolactam	8000	U
59-50-7	4-Chloro-3-methylphenol	4100	U
91-57-6	2-Methylnaphthalene	2700	JD
77-47-4	Hexachlorocyclo-pentadiene	8000	U
88-06-2	2,4,6-Trichlorophenol	4100	U
95-95-4	2,4,5-Trichlorophenol	4100	U
92-52-4	1,1'-Biphenyl	700	JD

Form 1A-OR

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### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2 Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035

Lab Code: EQI Case No.: 47927	<u></u>
Analytical Method: _SVOA	
Matrix: Soil	
Sample wt/vol: 30.0 (g/mL)	
% Solids: <u>82.9</u>	
GC Column: Zebron ZB-SV ID: 0.25	( mm )
GC Column: ID:	(mm)
Extract Concentrated: (Y/N) Y	
Soil Aliquot (VOA):	(uL)
Heated Purge: (Y/N)	
Purge Volume:	(mL)
Cleanup Types:GPC	
Concentration Units (ug/L, mg/L, ug/	′Kg):

protocological and protocologica		
MA No.:	SDG No.: _ ESNP2	
Level: LOW		
Lab Sample ID:	J23060-019	
Lab File ID:		
Date Received:1	0/24/2018	
Date Extracted:	10/24/2018	
Date Analyzed:1	1/01/2018	
Extract Volume:	500	(uL)
Extraction Type:_	SONC	
Injection Volume:		(uL)
pH: Diluti	on Factor: 20.0	
Cleanup Factor: 2		
ug/kg		

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	4100	U
88-74-4	2-Nitroaniline	4100	U
131-11-3	Dimethylphthalate	4100	U
606-20-2	2,6-Dinitrotoluene	4100	U
208-96-8	Acenaphthylene	9800	D
99-09-2	3-Nitroaniline	8000	U
83-32-9	Acenaphthene	2700	JD
51-28-5	2,4-Dinitrophenol	8000	U
100-02-7	4-Nitrophenol	8000	U
132-64-9	Dibenzofuran	3200	JD
121-14-2	2,4-Dinitrotoluene	4100	U
84-66-2	Diethylphthalate	4100	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4100	U
7005-72-3	4-Chlorophenyl-phenyl ether	4100	U
86-73-7	Fluorene	. 3000	JD
100-01-6	4-Nitroaniline	8000	U
534-52-1	4,6-Dinitro-2-methylphenol	8000	U
101-55-3	4-Bromophenyl-phenylether	4100	U
86-30-6	N-Nitrosodiphenylamine	4100	U
118-74-1	Hexachlorobenzene	4100	U
1912-24-9	Atrazine	8000	U
87-86-5	Pentachlorophenol	8000	U
85-01-8	Phenanthrene	40000	D
120-12-7	Anthracene	13000	D
86-74-8	Carbazole	4300	JD
84-74-2	Di-n-butylphthalate	4100	U
206-44-0	Fluoranthene	96000	ΕD

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035
Lab Code: EQI Case No.: 47927		MA No.: SDG No.:SNP2
Analytical Method: SVOA		Level:LOW
Matrix: Soil		Lab Sample ID:
Sample wt/vol: 30.0 (g/mL)		Lab File ID: 12110131
% Solids: 82.9		Date Received:
GC Column: Zebron ZB-SV ID: 0.25 (	( mm )	Date Extracted: 10/24/2018
GC Column: ID: (i	mm)	Date Analyzed:11/01/2018
Extract Concentrated: (Y/N) Y		Extract Volume: 500 (uL)
Soil Aliquot (VOA): (1	uL)	Extraction Type: SONC
Heated Purge: (Y/N)		Injection Volume: <u>1.0</u> (uL)
Purge Volume:(1	mL)	pH: Dilution Factor: 20.0
Cleanup Types:GPC		Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg	g):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	74000	ЕD
85-68-7	Butylbenzylphthalate	4100	U .
91-94-1	3,3'-Dichlorobenzidine	8000	U
56-55-3	Benzo(a)anthracene	61000	D
218-01-9	Chrysene	61000	D
117-81-7	bis(2-Ethylhexyl)phthalate	460	JD
117-84-0	Di-n-octylphthalate	8000	U
205-99-2	Benzo(b)fluoranthene	85000	ΕD
207-08-9	Benzo(k)fluoranthene	36000	D
50-32-8	Benzo(a)pyrene	77000	ΕD
193-39-5	Indeno(1,2,3-cd)pyrene	55000	D
53-70-3	Dibenzo(a,h)anthracene	4100	U
191-24-2	Benzo(q,h,i)perylene	53000	DB
58-90-2	2,3,4,6-Tetrachlorophenol	4100	U

Form 1A-OR

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ2

Lab Name: Shealy Er	nvironmental Services, Inc.	Contract:_	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.:ESN	IP2
Analytical Method		Level:			
Matrix: Soil		Lab Sample	TD: TJ23	060-019	
	30.0 (g/mL) g	Lab File I			
% Solids: 82.9		Date Recei			
GC Column: Zebron	ZB-SV ID: 0.25 (mm)	Date Extra			
· · · · · · · · · · · · · · · · · · ·		Date Analy:			
Extract Concentra					(uL)
-	A): (uL)	Extract Vo	Lume:		(ull)
Heated Purge: (Y,	/N)	Extraction			
Purge Volume:	(mT,)	Injection V			
Cleanup Types:(	GPC	рН:	Dilution	Factor: <u>20.0</u>	
Concentration Uni	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	ctor: <u>2</u>		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01	Unknown-01		10.13	16000	JD
02 238-84-6	11H-Benzo[a]fluorene		11.28	1	NJ D
03	Unknown-02		11.36		JD
04239-35-0	Benzo[b]naphtho[2,1-d]thlophen	.e	12.06	2000	NJ D
05	Unknown-03		12.14	1700	JD
06	Unknown-04		12.57	1600	JD
07	Unknown-05		12.73	1800	JD
081705-84-6	Triphenylene, 2-methyl-		12.98	2300	NJ D
09 477-75-8	9,10[1',2']-Benzenoanthracene,	9,10-dihy	13.76	7200	NJ D
10 192-97-2	Benzo[e]pyrene		14.16	15000	NJ D
11	Unknown-06		14.28	7500	JD
12 602-55-1	Anthracene, 9-phenyl-		14.36	6800	NJ D
13 198-55-0	Perylene		14.66	27000	NJ D
14 220-97-3	11H-Indeno[2,1-a]phenant	hrene	14.85	6200	NJ D
15239-85-0	13H-Dibenzo[a,h]fluorene		14.91	8600	NJ D
16215-58-7	Benzo[b]triphenylene		16.35	7100	NJ D
17	Unknown-07		16.40	9100	JD
18214-17-5	Benzo[b]chrysene		16.84	11000	NJ D
19213-46-7	Picene		16.92	7600	NJ D
20	Unknown-08		17.41	7200	JD
21 191-26-4	Dibenzo[def,mno]chrysene		17.54	15000	NJ D
22 5385-75-1	Dibenz(a,e)aceanthrylene		20.18	22000	NJ D

<sup>2</sup>EPA-designated Registry Number.

3,4:8,9-Dibenzopyrene

1,2:4,5-Dibenzopyrene

Total Alkanes

23

189-64-0

24 192-65-4

E966796<sup>2</sup>

Form 1B-OR

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16000

11000

NJ D

NJ D

20.43

20.54

N/A

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2DL

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:
Analytical Method: _SVOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.0 (g/mL)	Lab File ID: 12110213
% Solids: 82.9	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID:(mm)	Date Analyzed:11/02/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 50.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	4000	U
100-52-7	Benzaldehyde	20000	U
108-95-2	Phenol	20000	U
111-44-4	Bis(2-Chloroethyl) ether	20000	U
95-57-8	2-Chlorophenol	10000	U
95-48-7	2-Methylphenol	20000	U
108-60-1	2,2'-Oxybis(1-chloropropane)	20000	U
98-86-2	Acetophenone	20000	U
106-44-5	3-Methylphenol + 4-Methylphenol	20000	U
621-64-7	N-Nitroso-di-n propylamine	10000	U
67-72-1	Hexachloroethane	10000	U
98-95-3	Nitrobenzene	10000	U
78-59-1	Isophorone	10000	U
88-75-5	2-Nitrophenol	10000	U
105-67-9	2,4-Dimethylphenol	10000	U
111-91-1	bis(2-Chloroethoxy)methane	10000	U
120-83-2	2,4-Dichlorophenol	10000	U
91-20-3	Naphthalene	14000	D
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	10000	U
105-60-2	Caprolactam	20000	U
59-50-7	4-Chloro-3-methylphenol	10000	U
91-57-6	2-Methylnaphthalene	3200	JD
77-47-4	Hexachlorocyclo-pentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	10000	U
95-95-4	2,4,5-Trichlorophenol	10000	U
92-52-4	1,1'-Biphenyl	10000	U

Form 1A-OR

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ESNQ2DL

(uL)

\_\_\_\_ (uL)

### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Contract: EP-W-14035 Lab Name: Shealy Environmental Services, Inc. MA No.: \_\_\_\_\_ SDG No.: \_ESNP2 Case No.: 47927 Level: LOW Analytical Method: SVOA 30.0 (g/mL) <u>9</u> 12110213 Lab File ID: \_\_\_\_ Date Received: 10/24/2018 GC Column: Zebron ZB-SV ID: 0.25 (mm) Date Extracted: 10/24/2018 Date Analyzed: \_\_\_\_\_11/02/2018 GC\_Column:\_\_\_\_\_ID:\_\_\_\_(mm) Extract Concentrated: (Y/N) Y Extract Volume: 500 Extraction Type: SONC Soil Aliquot (VOA): \_\_\_\_\_ (uL) Injection Volume: <u>1.0</u> Heated Purge: (Y/N)\_\_\_\_\_ pH: \_\_\_\_\_ Dilution Factor: 50.0 (mL) Cleanup Factor: 2

ug/kg

Concentration Units (ug/L, mg/L, ug/Kg):

Lab Code: EQI

Matrix: Soil

Sample wt/vol:

% Solids: 82.9

Purge Volume:\_\_\_\_

Cleanup Types: GPC

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	10000	U
88-74-4	2-Nitroaniline	10000	U
131-11-3	Dimethylphthalate	10000	U
606-20-2	2,6-Dinitrotoluene	10000	U
208-96-8	Acenaphthylene	12000	D
99-09-2	3-Nitroaniline	20000	U
83-32-9	Acenaphthene	3700	JD
51-28-5	2,4-Dinitrophenol	20000	U
100-02-7	4-Nitrophenol	20000	U
132-64-9	Dibenzofuran	4000	JD
121-14-2	2,4-Dinitrotoluene	10000	U
84-66-2	Diethylphthalate	10000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10000	U
7005-72-3	4-Chlorophenyl-phenyl ether	10000	U
86-73-7	Fluorene	3900	JD
100-01-6	4-Nitroaniline	20000	U
534-52-1	4,6-Dinitro-2-methylphenol	20000	U
101-55-3	4-Bromophenyl-phenylether	10000	U
86-30-6	N-Nitrosodiphenylamine	10000	U
118-74-1	Hexachlorobenzene	10000	U
1912-24-9	Atrazine	20000	U
87-86-5	Pentachlorophenol	20000	U
85-01-8	Phenanthrene	53000	D
120-12-7	Anthracene	17000	D
86-74-8	Carbazole	5500	JD
84-74-2	Di-n-butylphthalate	10000	U
206-44-0	Fluoranthene	120000	D

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(uL)

\_\_\_\_ (uL)

## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2DL

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method:	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.0 (g/mL)	Lab File ID:12110213
% Solids: 82.9	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:
Extract Concentrated: (Y/N) Y	Extract Volume: 500
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0
Purge Volume: (mL)	pH: Dilution Factor: 50.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	95000	D
85-68-7	Butylbenzylphthalate	10000	U
91-94-1	3,3'-Dichlorobenzidine	20000	U
56-55-3	Benzo(a)anthracene	80000	D
218-01-9	Chrysene	79000	 D
117-81-7	bis(2-Ethylhexyl)phthalate	10000	U
117-84-0	Di-n-octylphthalate	20000	U
205-99-2	Benzo(b)fluoranthene	120000	D
207-08-9	Benzo(k)fluoranthene	44000	D
50-32-8	Benzo(a)pyrene	96000	D
193-39-5	Indeno(1,2,3-cd)pyrene	72000	 D
53-70-3	Dibenzo(a,h)anthracene	10000	U
191-24-2	Benzo(q,h,i)perylene	72000	DB
58-90-2	2,3,4,6-Tetrachlorophenol	10000	U

Form 1A-OR

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ2DL

Lab Name: Shealy E	Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Metho	bd: SVOA	Level:	JOW		
Matrix: Soil		Lab Sample		060-019	
	30.0 (g/mL) g	Lab File ID			
% Solids: 82.9		Date Receiv			
	n ZB-SV ID: 0.25 (mm)	Date Extrac			
Extract Concentr		Date Analyz			
			50		(uL)
	DA):(uL)	Extract Vol	une .		(uz)
	(/N)	Extraction			
	(mL)	Injection V			
Cleanup Types:		рН:	Dilution	Factor: <u>50.0</u>	
Concentration Ur	nits (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	tor: <u>2</u>		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01203-64-5	4H-Cyclopenta[def]phenan	threne	10.13	17000	NJ D
22381-21-7	Pyrene, 1-methyl-		11.15	4200	NJ D
)3238-84-6	11H-Benzo[a]fluorene		11.28	6700	NJ D
)4 243-17-4	11H-Benzo[b]fluorene		11.35	5900	NJ D
)5239-35-0	Benzo[b]naphtho[2,1-d]thiophen	le	12.05	5200	NJ D
)6479-79-8	11H-Benzo[a]fluoren-11-o	ne	12.18	5000	NJ D
07239-01-0	11H-Benzo[a]carbazole		12.72	4300	NJ D
)8 <u>1705-84-6</u>	Triphenylene, 2-methyl-		12.97	8000	NJ D
	Unknown-01		13.75	11000	JD
L0 192-97-2	Benzo[e]pyrene		14.15	23000	NJ D
1 207-93-2	Dinaphtho[1,2-b:1',2'-d]	furan	14.27	12000	
12	Unknown-02		14.36	11000	JD
13 205-82-3	Benzo[j]fluoranthene		14.64	37000	
	Unknown-03		16.32	14000	
	Unknown-04		16.38		
6 215 - 58 - 7	Benzo[b]triphenylene		16.81		
17 18 191-26-4	Unknown-05 Dibenzo[def,mno]chrysene		<u>   16.90</u> 17.50	<u>16000</u> 24000	
9 189-55-9	Dibenzo(a,i)pyrene		20.14	16000	NJ D
20 189-64-0	3,4:8,9-Dibenzopyrene		20.14	25000	NJ D
21				20000	110 2
22					
23					
24					
25					
26					
27					
28					
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A		

<sup>2</sup>EPA-designated Registry Number.

Form 1B-OR

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ESNQ3

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: _SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.5 (g/mL)	Lab File ID: 12110132
% Solids: 81.4	Date Received:10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed: <u>11/01/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 20.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	6500	U
100-52-7	Benzaldehyde	32000	U
108-95-2	Phenol	32000	U
111-44-4	Bis(2-Chloroethyl) ether	32000	U
95-57-8	2-Chlorophenol	16000	U
95-48-7	2-Methylphenol	32000	U
108-60-1	2,2'-Oxybis(1-chloropropane)	32000	U
98-86-2	Acetophenone	32000	U
106-44-5	3-Methylphenol + 4-Methylphenol	32000	U
621-64-7	N-Nitroso-di-n propylamine	16000	U
67-72-1	Hexachloroethane	16000	U
98-95-3	Nitrobenzene	16000	U
78-59-1	Isophorone	16000	U
88-75-5	2-Nitrophenol	16000	U
105-67-9	2,4-Dimethylphenol	16000	U
111-91-1	bis(2-Chloroethoxy)methane	16000	U
120-83-2	2,4-Dichlorophenol	16000	U
91-20-3	Naphthalene	79000	D
106-47-8	4-Chloroaniline	32000	U
87-68-3	Hexachlorobutadiene	16000	U
105-60-2	Caprolactam	32000	U
59-50-7	4-Chloro-3-methylphenol	16000	U
91-57-6	2-Methylnaphthalene	14000	JD
77-47-4	Hexachlorocyclo-pentadiene	32000	U
88-06-2	2,4,6-Trichlorophenol	16000	U
95-95-4	2,4,5-Trichlorophenol	16000	U
92-52-4	1,1'-Biphenyl	4700	JD

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ3
ALYTE LIST
Contract: EP-W-14035
MA No.: \_\_\_\_\_\_ SDG No.: ESNP2
Level: LOW

Lab Code: EQI Case No.: 47927	
Analytical Method: SVOA	
Matrix: Soil	
Sample wt/vol:30.5(g/mL)	
% Solids:81.4	
GC Column: Zebron ZB-SV ID: 0.25	( mm )
GC Column: ID:	(mm)
Extract Concentrated: (Y/N) Y	
Soil Aliquot (VOA):	(uL)
Heated Purge: (Y/N)	
Purge Volume:	(mL)
Cleanup Types:GPC	<u> </u>
Concentration Units (ug/L, mg/L, ug/	Kg):

•••

Lab Name: Shealy Environmental Services, Inc.

MA No.:	SDG No.: _E	SNP2
Level: LOW		
Lab Sample ID:	23060-020	
Lab File ID: 12		
Date Received:1	0/24/2018	····
Date Extracted: 1	0/24/2018	
Date Analyzed:1	1/01/2018	
Extract Volume:	2000	(uL)
Extraction Type:	SONC	
Injection Volume:		(uL)
pH: Dilutio	on Factor: <u>20</u>	).0
Cleanup Factor: 2		
ua/ka		

CAS NO.	COMPOUND	CONCENTRATION	·Q
91-58-7	2-Chloronaphthalene	16000	U
88-74-4	2-Nitroaniline	16000	U
131-11-3	Dimethylphthalate	16000	U
606-20-2	2,6-Dinitrotoluene	16000	U
208-96-8	Acenaphthylene	130000	D
99-09-2	3-Nitroaniline	32000	U
83-32-9	Acenaphthene	4500	JD
51-28-5	2,4-Dinitrophenol	32000	U
100-02-7	4-Nitrophenol	32000	U
132-64-9	Dibenzofuran	27000	D
121-14-2	2,4-Dinitrotoluene	16000	U
84-66-2	Diethylphthalate	16000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	16000	U
7005-72-3	4-Chlorophenyl-phenyl ether	16000	U
86-73-7	Fluorene	24000	D
100-01-6	4-Nitroaniline	32000	U
534-52-1	4,6-Dinitro-2-methylphenol	32000	U
101-55-3	4-Bromophenyl-phenylether	16000	U
86-30-6	N-Nitrosodiphenylamine	16000	U
118-74-1	Hexachlorobenzene	16000	U
1912-24-9	Atrazine	32000	U
87-86-5	Pentachlorophenol	32000	U
85-01-8	Phenanthrene	340000	ΕD
120-12-7	Anthracene	110000	D
86-74-8	Carbazole	32000	D
84-74-2	Di-n-butylphthalate	16000	U
206-44-0	Fluoranthene	1000000	ΕD

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNQ3

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:30.5(g/mL)	Lab File ID:12110132
% Solids:81.4	Date Received:10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed: <u>11/01/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: 2000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 20.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	660000	ЕD
85-68-7	Butylbenzylphthalate	16000	U
91-94-1	3,3'-Dichlorobenzidine	32000	U
56-55-3	Benzo(a)anthracene	430000	ΕD
218-01-9	Chrysene	430000	ΕD
117-81-7	bis(2-Ethylhexyl)phthalate	2200	JD
117-84-0	Di-n-octylphthalate	32000	U
205-99-2	Benzo(b)fluoranthene	590000	ΕD
207-08-9	Benzo(k)fluoranthene	240000	D
50-32-8	Benzo(a)pyrene	430000	ΕD
193-39-5	Indeno(1,2,3-cd)pyrene	300000	ΕD
53-70-3	Dibenzo(a, h) anthracene	16000	U
191-24-2	Benzo(q,h,i)perylene	290000	E DB
58-90-2	2,3,4,6-Tetrachlorophenol	16000	U

Form 1A-OR

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ3

Lab Name: Shealy Er	vironmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SI	DG No.: ESN	IP2
Analytical Method	d: SVOA	Level:			
Matrix: Soil		Lab Sample		060-020	
Sample wt/vol:	30.5 (g/mL) g	Lab File II			
% Solids: 81.4		Date Receiv			
GC Column: Zebron	ZB-SV ID: 0.25 (mm)	Date Extrac	ted: 10/2	4/2018	
Extract Concentra	ated: (Y/N) Y	Date Analyz			
	A): (uL)	Extract Vol			(uL)
	/N)	Extraction			
	(mL)	Injection V			
Cleanup Types:				Factor: 20.0	
				ractor: <u>20.0</u>	
Concentration Uni	ts (ug/L, ug/Kg):ug/kg	Cleanup Fac	tor: <u>2</u>		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
01203-64-5	4H-Cyclopenta[def]phenant	chrene	10.13	120000	NJ D
02	Unknown-01		10.79	140000	JD
03	Unknown-02		10.86	91000	JD
04243-17-4	11H-Benzo[b]fluorene		11.28	13000	NJ D
053442-78-2	Pyrene, 2-methyl-		11.36	8100	NJ D
06 <u>239-35-0</u>	Benzo[b]naphtho[2,1-d]thiophene	2	12.06	8900	NJ D
07	Unknown-03		12.14	8800	JD
08 479-79-8	11H-Benzo[a]fluoren-11-or		12.19	7400	NJ D
09 <u>82-05-3</u>	7H-Benz[de]anthracen-7-or	ne	12.63	6600	NJ D
10	Unknown-04		12.73	6700	JD
11 1705-84-6	Triphenylene, 2-methyl-		12.98	7800	NJ D
12	Unknown-05		13.76	45000	J D
13 <u>192-97-2</u> 14	Benzo[e]pyrene Unknown-06		<u>14.17</u> 14.29	<u>100000</u> 36000	<u>NJD</u> JD
15 198-55-0	Perylene		14.67	160000	
16239-85-0	13H-Dibenzo[a,h]fluorene		14.91	36000	
17 135-48-8	Pentacene		16.35	40000	
18 191-26-4	Dibenzo[def,mno]chrysene		16.40	64000	
19214-17-5	Benzo[b]chrysene		16.85	49000	NJ D
20215-58-7	Benzo[b]triphenylene		16.93	55000	NJ D
21 189-55-9	Dibenzo(a,i)pyrene		20.18	96000	NJ D
22 189-64-0	3,4:8,9-Dibenzopyrene		20.44	79000	NJ D
23 192-65-4	1,2:4,5-Dibenzopyrene		20.54	54000	NJ D
2 4					
25					
26					
27					
28					
29					
30					
E966796 <sup>2</sup>	Total Alkanes		N/A	l	

 $^{2}\,\mbox{EPA-designated}$  Registry Number.

Form 1B-OR

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TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNQ3DL

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol:30.5(g/mL)	
% Solids: 81.4	Date Received: <u>10/24/2018</u>
GC Column: Zebron ZB-SV ID: 0.25 (mm	) Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed: <u>11/02/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: 2000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 100.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	
CAS NO. COMPOUND	

CAS NO.	COMPOUND	CONCENTRATION	Q
123-91-1	1,4-Dioxane	32000	U
100-52-7	Benzaldehyde	160000	U
108-95-2	Phenol	160000	U
111-44-4	Bis(2-Chloroethyl) ether	160000	U
95-57-8	2-Chlorophenol	82000	υ
95-48-7	2-Methylphenol	160000	U
108-60-1	2,2'-Oxybis(1-chloropropane)	160000	U
98-86-2	Acetophenone	160000	U
106-44-5	3-Methylphenol + 4-Methylphenol	160000	U
621-64-7	N-Nitroso-di-n propylamine	82000	U
67-72-1	Hexachloroethane	82000	U
98-95-3	Nitrobenzene	82000	U
78-59-1	Isophorone	82000	U
88-75-5	2-Nitrophenol	82000	U
105-67-9	2,4-Dimethylphenol	82000	U
111-91-1	bis(2-Chloroethoxy)methane	82000	U
120-83-2	2,4-Dichlorophenol	82000	U
91-20-3	Naphthalene	98000	D
106-47-8	4-Chloroaniline	160000	U
87-68-3	Hexachlorobutadiene	82000	U
105-60-2	Caprolactam	160000	U
59-50-7	4-Chloro-3-methylphenol	82000	U
91-57-6	2-Methylnaphthalene	19000	JD
77-47-4	Hexachlorocyclo-pentadiene	160000	U
88-06-2	2,4,6-Trichlorophenol	82000	U
95-95-4	2,4,5-Trichlorophenol	82000	U
92-52-4	1,1'-Biphenyl	82000	U

Form 1A-OR

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ3DL

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID: TJ23060-020
Sample wt/vol: 30.5 (g/mL)	Lab File ID: 12110214
% Solids: 81.4	Date Received: 10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:11/02/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 2000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume:(mL)	pH: Dilution Factor: 100.0
Cleanup Types:GPC	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	82000	U
88-74-4	2-Nitroaniline	82000	U
131-11-3	Dimethylphthalate	82000	U
606-20-2	2,6-Dinitrotoluene	82000	U
208-96-8	Acenaphthylene	150000	D
99-09-2	3-Nitroaniline	160000	U
83-32-9	Acenaphthene	82000	U
51-28-5	2,4-Dinitrophenol	160000	U
100-02-7	4-Nitrophenol	160000	U
132-64-9	Dibenzofuran	37000	JD
121-14-2	2,4-Dinitrotoluene	82000	U
84-66-2	Diethylphthalate	82000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	82000	U
7005-72-3	4-Chlorophenyl-phenyl ether	82000	U
86-73-7	Fluorene	30000	JD
100-01-6	4-Nitroaniline	160000	U
534-52-1	4,6-Dinitro-2-methylphenol	160000	U
101-55-3	4-Bromophenyl-phenylether	82000	U
86-30-6	N-Nitrosodiphenylamine	82000	U
118-74-1	Hexachlorobenzene	82000	U
1912-24-9	Atrazine	160000	U
87-86-5	Pentachlorophenol	160000	U
85-01-8	Phenanthrene	420000	D
120-12-7	Anthracene	120000	D
86-74-8	Carbazole	40000	JD
84-74-2	Di-n-butylphthalate	82000	U
206-44-0	Fluoranthene	1100000	D

Form 1A-OR

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TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNQ3DL

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method: SVOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.5 (g/mL)	Lab File ID: 12110214
% Solids: 81.4	Date Received:10/24/2018
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:
Extract Concentrated: (Y/N) Y	Extract Volume: 2000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 100.0
Cleanup Types: <u>GPC</u>	Cleanup Factor: 2
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
129-00-0	Pyrene	920000	D
85-68-7	Butylbenzylphthalate	82000	U
91-94-1	3,3'-Dichlorobenzidine	160000	U
56-55-3	Benzo(a)anthracene	570000	 D
218-01-9	Chrysene	560000	D
117-81-7	bis(2-Ethylhexyl)phthalate	82000	U
117-84-0	Di-n-octylphthalate	160000	U
205-99-2	Benzo(b)fluoranthene	810000	 D
207-08-9	Benzo(k)fluoranthene	290000	 D
50-32-8	Benzo(a)pyrene	560000	 D
193-39-5	Indeno(1,2,3-cd)pyrene	420000	 D
53-70-3	Dibenzo(a,h)anthracene	82000	U
191-24-2	Benzo(q,h,i)perylene	410000	DB
58-90-2	2,3,4,6-Tetrachlorophenol	82000	<u>U</u>

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ESNQ3DL

Lab Name: Shealy Environmental Services, Inc.	Contract: _E	P-W-14035		
Lab Code: EQI Case No.: 47927	MA No.:	SI	G No.: ESN	IP2
Analytical Method: SVOA	Level: L	OW		
Matrix: Soil	Lab Sample		060-020	
Sample wt/vol: 30.5 (g/mL) g	Lab File ID			
% Solids: 81.4	Date Receiv			
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extrac			
Extract Concentrated: (Y/N) Y	Date Analyz			
Soil Aliquot (VOA): (uL)	Extract Vol			(uL)
Heated Purge: (Y/N)	Extraction		NC	
Purge Volume:(mL)	Injection V			tariana di di s
Cleanup Types: <u>GPC</u>	pH:			0
			Factor.	
Concentration Units (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Fac	tor:		
CAS NUMBER COMPOUND NAME		RT	EST. CONC.	Q
01203-64-5 4H-Cyclopenta[def]phenan	threne	10.13	120000	NJ D
02 5737-13-3 Cyclopenta(def)phenanthr	renone	10.62	61000	NJ D
03Unknown-01		10.79	120000	JD
04Unknown-02		10.86	63000	JD
05243-42-5 Benzo[b]naphtho[2,3-d]fu	ıran	10.90	110000	NJ D
0633543-31-6 Fluoranthene, 2-methyl-		11.28	40000	
07 243-46-9 Benzo[b]naphtho[2,3-d]thiophen	ie	12.06	38000	
08203-12-3 Benzo[ghi]fluoranthene		12.13	38000	
097476-08-6 Benz (a) anthracene-7-carbonitri	le	13.75	82000	
10 <u>192-97-2</u> Benzo[e]pyrene		14.15	180000	
11 207-93-2 Dinaphtho[1,2-b:1',2'-d]	furan	14.27	58000	
12 198-55-0 Perylene		14.43	430000	
13         205-82-3         Benzo[j]fluoranthene           14         Unknown-03		<u>14.64</u> 15.37	<u>240000</u> 53000	
15 Unknown-04		16.32	73000	
16 Unknown-05		16.37		
17 213-46-7 Picene		16.81	73000	
18215-58-7Benzo[b]triphenylene		16.89	56000	
19         193-43-1         Indeno[1,2,3-cd]fluorant	hene	17.50	73000	NJ D
20189-64-0 3,4:8,9-Dibenzopyrene		20.13	75000	NJ D
21 189-55-9 Dibenzo(a,i)pyrene		20.38	94000	NJ D
22				
23				
24				
25				
26				
27				
28			l	
29				
30				
E966796 <sup>2</sup> Total Alkanes		N/A	1	l

<sup>2</sup>EPA-designated Registry Number.

Form 1B-OR

SOM02.4 (10/2016) 1430 of 2916 FORM LA-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST EFA SAMFLE NU.

SBLK68

Lab Name: Shea	ly Environmental Services, Inc.		Contract: _E	<sup>D</sup> -W-14035	
Lab Code: EQI	Case No.: 47927		MA No.:	SDG No.: _ESN	IP2
Analytical Met	hod: SVOA		Level:LC	W	
Matrix: Soil				D:TQ87468-001	
Sample wt/vol:	(g/mL)	• • •		. 12110109	
% Solids:10	0		Date Receive	d:	
GC Column: Zeb	ron ZB-SV ID: 0.25	( mm )	Date Extract		
GC Column:	ID:	(mm)	Date Analyze	d: <u>11/01/2018</u>	
Extract Concen	trated: (Y/N) Y		Extract Volu		(uL)
Soil Aliquot (	VOA):	(uL)	Extraction T	ype: SONC	
	(Y/N)		Injection Vo	lume: 1.0	(uL)
Purge Volume:_		(mL)	рН: D	ilution Factor: <u>1.0</u>	
Cleanup Types:			Cleanup Fact		
	Units (ug/L, mg/L, ug/	′Kg):	ug/kg		
CAS NO.	COMPOUND			CONCENTRATION	Q
123-91-1	1,4-Dioxane			67	U
100-52-7	Benzaldehyde			330	U
108-95-2	Phenol			330	U
111-44-4	Bis(2-Chloroethyl) e	ther		330	U
95-57-8	2-Chlorophenol			170	Ū.
95-48-7	2-Methylphenol			330	U
108-60-1	2,2'-Oxybis(1-chlorop	propane)		330	υ
98-86-2	Acetophenone			330	U
106-44-5	3-Methylphenol + 4-Me	ethylphe	enol	330	U
621-64-7	N-Nitroso-di-n propy	lamine	,	170	U
67-72-1	Hexachloroethane			170	U

98-95-3

78-59-1

88-75-5

105-67-9

111-91-1

120-83-2

91-20-3

106-47-8

87-68-3

105-60-2

59-50-7

91-57-6

77-47-4

88-06-2

95-95-4

92-52-4

Nitrobenzene

2-Nitrophenol

2,4-Dimethylphenol

2,4-Dichlorophenol

Hexachlorobutadiene

2-Methylnaphthalene

2,4,6-Trichlorophenol

2,4,5-Trichlorophenol

4-Chloro-3-methylphenol

Hexachlorocyclo-pentadiene

4-Chloroaniline

bis(2-Chloroethoxy)methane

Isophorone

Naphthalene

Caprolactam

1,1'-Biphenyl

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

SBLK68

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: SVOA	Level: LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.0 (g/mL)	
% Solids: 100	Data Dagainal
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:11/01/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types: GPC	Cleanup Factor: 2
. Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
91-58-7	2-Chloronaphthalene	170	U
88-74-4	2-Nitroaniline	170	U
131-11-3	Dimethylphthalate	170	U
606-20-2	2,6-Dinitrotoluene	170	U
208-96-8	Acenaphthylene	170	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	170	U
51-28-5	2,4-Dinitrophenol	330	U
100-02-7	4-Nitrophenol	330	U
132-64-9	Dibenzofuran	170	U
121-14-2	2,4-Dinitrotoluene	170	U
84-66-2	Diethylphthalate	170	U
95-94-3	1,2,4,5-Tetrachlorobenzene	170	U
7005-72-3	4-Chlorophenyl-phenyl ether	170	U
86-73-7	Fluorene	170	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	330	U
101-55-3	4-Bromophenyl-phenylether	170	U
86-30-6	N-Nitrosodiphenylamine	170	U
118-74-1	Hexachlorobenzene	170	U
1912-24-9	Atrazine	330	U
87-86-5	Pentachlorophenol	330	U
85-01-8	Phenanthrene	170	U
120-12-7	Anthracene	170	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	170	U
206-44-0	Fluoranthene	330	U

Form 1A-OR

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# ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

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SBLK68

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	
Analytical Method: SVOA	Level:LOW
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.0 (g/mL) g	
% Solids: 100	Date Received:
GC Column: Zebron ZB-SV ID: 0.25 (mm)	Date Extracted: 10/24/2018
GC Column: ID: (mm)	Date Analyzed:11/01/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 500 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types: GPC	
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q
129-00-0 Pyrene	170 U
85-68-7 Butylbenzylphthalate	170 U

3,3'-Dichlorobenzidine

bis(2-Ethylhexyl)phthalate

Benzo(a)anthracene

Di-n-octylphthalate

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Indeno(1,2,3-cd)pyrene

Dibenzo(a,h)anthracene

2,3,4,6-Tetrachlorophenol

Benzo(q,h,i)perylene

Benzo(a)pyrene

Chrysene

91-94-1

56-55-3

218-01-9

117-81-7

117-84-0

205-99-2

207-08-9

50-32-8

193-39-5

53-70-3

191-24-2

58-90-2

Form 1A-OR

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#### FORM 1B-OR ORGANIC ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-14035

EPA SAMPLE NO.

SBLK68

Lab Code: EQI	Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Metho	d: SVOA	Level: LOW
Matrix: Soil		Lab Sample ID:TQ87468-001
Sample wt/vol:	30.0 (g/mL) g	Lab File ID:12110109
		Date Received:
GC Column: Zebror	<b>ZB-SV</b> ID: 0.25 (mm)	Date Extracted: 10/24/2018
Extract Concentr	ated: (Y/N) Y	Date Analyzed: 11/01/2018
Soil Aliquot (VO	A): (uL)	Extract Volume: 500 (u
Heated Purge: (Y	/N)	Extraction Type: SONC
	(mL)	Injection Volume: 1.0
Cleanup Types:	GPC	pH: Dilution Factor: 1.0
Concentration Un	its (ug/L, ug/Kg): <u>ug/kg</u>	Cleanup Factor: 2
CAS NUMBER	COMPOUND NAME	RT EST. CONC. Q
1	Unknown-01	4.47 530 J
2		
3		
4		
5		
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8		
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9		
0		
E966796 <sup>2</sup> <sup>2</sup> EPA-designated R	Total Alkanes	N/A

Form 1B-OR

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FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST CER SAMELL NU.

ESNP2

Lab Name: Shea	y Environmental Services, Inc.	Contract:	EP-W-14035	
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.:	P2
Analytical Met	hod: PEST			
Matrix: Soil		Lab Sample	∋ ID:	
Sample wt/vol:	30.4 (g/mL)		ID:	
% Solids:25	.4	Date Recei	lved: 10/24/2018	
GC Column: DB-	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018	
	XLB ID: 0.32 (mm)	Date Analy	yzed: 10/31/2018	
	trated: (Y/N) Y		5000	(uL)
	VOA):(uL)		Type: SONC	
	(Y/N)		Volume: 1.0	(uL)
	(mL)		Dilution Factor: 1.0	
5	GPC,Florisil		actor: 2,1	
	Units (ug/L, mg/L, ug/Kg):	. ug/kg		
r	I		[	
CAS NO.	COMPOUND		CONCENTRATION	Q
319-84-6	alpha-BHC		1.1	JP
319-85-7	beta-BHC		8.7	PB
319-86-8	delta-BHC		3.4	JP
58-89-9	gamma-BHC (Lindane)		3.1	JP
76-44-8	Heptachlor		5.5	JP
309-00-2	Aldrin		5.5	J
1024-57-3	Heptachlor epoxide		7.1	Р
959-98-8	Endosulfan I		1.9	JP
60-57-1	Dieldrin		5.5	JP
72-55-9	4,4'-DDE		34	
72-20-8	Endrin		0.90	JP
33213-65-9	Endosulfan II		13	U
72-54-8	4,4'-DDD		50	
1031-07-8	Endosulfan sulfate		13	U
50-29-3	4,4'-DDT		11	JP /
72-43-5	Methoxychlor		66	U
53494-70-5	Endrin ketone		13	U
7421-93-4	Endrin aldehyde	5a	13	U
5103-71-9	cis-Chlordane		6.6	U
5103-74-2	turne Ohlendere			
0200 12 2	trans-Chlordane		28	P

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP3

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: PEST	
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.6 (g/mL)	04050004
% Solids: 38.1	Date Received: 10/24/2018
GC Column: DB-35MS ID: 0.32 (1	mm) Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (m	mm) Date Analyzed: 10/31/2018
Extract Concentrated: (Y/N) Y	5000
Soil Aliquot (VOA): (u	uL) Extraction Type: SONC
Heated Purge: (Y/N)	10
Purge Volume:(n	mL) pH: Dilution Factor: 1.0
Cleanup Types: GPC,Florisil	Cleanup Factor: 2,1
Concentration Units (ug/L, mg/L, ug/Kg	<i>n</i>
CAS NO. COMPOUND	CONCENTRATION Q
319-84-6 alpha-BHC	4.4 U
319-85-7 beta-BHC	4.4 2.4 JPBU
319-86-8 delta-BHC	0.61 JP

319-86-8

58-89-9

76-44-8

309-00-2

1024-57-3

959-98-8

60-57-1

72-55-9

72-20-8

33213-65-9 72-54-8

1031-07-8

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

50-29-3

72-43-5

delta-BHC

Heptachlor

Endosulfan I

Endosulfan II

Aldrin

Dieldrin

4,4'-DDE

4,4'-DDD

4,4'-DDT

Methoxychlor

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

Endrin

gamma-BHC (Lindane)

Heptachlor epoxide

Endosulfan sulfate

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP3DL

Lab Code: EQI       Case No.: 47927       MA No.:SDG No.: ESNP2         Analytical Method: PEST       Level:	Lab Name: Shealy	/ Environmental Services, Inc.		Contract: EP-W-14035
Analytical Method: PEST       Level:	Lab Code: EQI	Case No.: 47927		MA No.: SDG No.:SNP2
Sample wt/vol:       30.6       (g/mL) 9       Lab File ID:       004F0401         % Solids:       38.1       Date Received:       10/24/2018         GC Column:       DB-35MS       ID:       0.32       (mm)       Date Extracted:       10/26/2018         GC Column:       DB-XLB       ID:       0.32       (mm)       Date Extracted:       10/26/2018         GC Column:       DB-XLB       ID:       0.32       (mm)       Date Analyzed:       11/02/2018         Extract Concentrated:       (Y/N)       Y       Extract Volume:       5000       (uL)         Soil Aliquot (VOA):				Level:
Sample wt/vol:       30.6       (g/mL) 9       Lab File ID:       004F0401         % Solids:       38.1       Date Received:       10/24/2018         GC Column:       DB-35MS       ID:       0.32       (mm)       Date Extracted:       10/26/2018         GC Column:       DB-XLB       ID:       0.32       (mm)       Date Extracted:       10/26/2018         GC Column:       DB-XLB       ID:       0.32       (mm)       Date Analyzed:       11/02/2018         Extract Concentrated:       (Y/N)       Y       Extract Volume:       5000       (uL)         Soil Aliquot (VOA):	Matrix: Soil			Lab Sample ID:
GC Column: DB-35MS       ID: 0.32       (mm)       Date Extracted: 10/26/2018         GC Column: DB-XLB       ID: 0.32       (mm)       Date Analyzed: 11/02/2018         Extract Concentrated: (Y/N) Y       Extract Volume: 5000       (uL)         Soil Aliquot (VOA):				Lab File ID: 004F0401
GC Column: DB-XLB       ID: 0.32       (mm)       Date Analyzed: 11/02/2018         Extract Concentrated: (Y/N) Y       Extract Volume: 5000       (uL)         Soil Aliquot (VOA):	% Solids: <u>38</u> .	1		Date Received: 10/24/2018
GC Column: DB-XLB       ID: 0.32 (mm)       Date Analyzed: 11/02/2018         Extract Concentrated: (Y/N) Y       Extract Volume: 5000 (uL)         Soil Aliquot (VOA):	GC Column: DB-3	35MS ID: 0.32 (I	mm )	Date Extracted: 10/26/2018
Extract Concentrated: (Y/N) Y       Extract Volume: 5000 (uL)         Soil Aliquot (VOA): (uL)       Extraction Type: SONC         Heated Purge: (Y/N) (mL)       Injection Volume: 1.0 (uL)         Purge Volume: (mL)       pH: Dilution Factor: 10.0         Cleanup Types: GPC,Florisil       Cleanup Factor: 2,1         Concentration Units (ug/L, mg/L, ug/Kg):       ug/kg         CAS NO.       COMPOUND       CONCENTRATION       Q         319-84-6       alpha-BHC       44       U         319-85-7       beta-BHC       44       U         319-86-8       delta-BHC       44       U         58-89-9       gamma-BHC (Lindane)       44       U         76-44-8       Heptachlor       44       U				
Heated Purge: (Y/N)       Injection Volume: 1.0       (uL)         Purge Volume:       (mL)       pH:       Dilution Factor: 10.0         Cleanup Types:       GPC,Florisil       Cleanup Factor: 2,1         Concentration Units (ug/L, mg/L, ug/Kg):       ug/kg         CAS NO.       COMPOUND       CONCENTRATION       Q         319-84-6       alpha-BHC       44       U         319-85-7       beta-BHC       44       U         319-86-8       delta-BHC       44       U         58-89-9       gamma-BHC (Lindane)       44       U         76-44-8       Heptachlor       44       U				
Heated Purge: (Y/N)       Injection Volume: 1.0 (uL)         Purge Volume:       (mL)         Cleanup Types:       GPC,Florisil         Concentration Units (ug/L, mg/L, ug/Kg):       Ug/kg         CAS NO.       COMPOUND         319-84-6       alpha-BHC         319-85-7       beta-BHC         44       U         319-86-8       delta-BHC         44       U         58-89-9       gamma-BHC (Lindane)         76-44-8       Heptachlor	Soil Aliquot ('	VOA):(u	ıL)	Extraction Type: SONC
Purge Volume:       (mL)       pH:       Dilution Factor:       10.0         Cleanup Types:       GPC,Florisil       Cleanup Factor:       2,1         Concentration Units (ug/L, mg/L, ug/Kg):       ug/kg       ug/kg         CAS NO.       COMPOUND       CONCENTRATION       Q         319-84-6       alpha-BHC       44       U         319-85-7       beta-BHC       44       U         319-86-8       delta-BHC       44       U         58-89-9       gamma-BHC (Lindane)       44       U         76-44-8       Heptachlor       44       U				
Concentration Units (ug/L, mg/L, ug/Kg):ug/kgCAS NO.COMPOUNDCONCENTRATIONQ319-84-6alpha-BHC44U319-85-7beta-BHC44U319-86-8delta-BHC44U58-89-9gamma-BHC (Lindane)44U76-44-8Heptachlor44U				pH: Dilution Factor: 10.0
CAS NO.         COMPOUND         CONCENTRATION         Q           319-84-6         alpha-BHC         44         U           319-85-7         beta-BHC         44         U           319-86-8         delta-BHC         44         U           58-89-9         gamma-BHC (Lindane)         44         U           76-44-8         Heptachlor         44         U	Cleanup Types:	GPC,Florisil		Cleanup Factor: 2,1
319-84-6       alpha-BHC       44       U         319-85-7       beta-BHC       44       U         319-86-8       delta-BHC       44       U         58-89-9       gamma-BHC (Lindane)       44       U         76-44-8       Heptachlor       44       U	Concentration N	Jnits (ug/L, mg/L, ug/Kg	r):	ug/kg
319-85-7         beta-BHC         44         U           319-86-8         delta-BHC         44         U           58-89-9         gamma-BHC (Lindane)         44         U           76-44-8         Heptachlor         44         U	CAS NO.	COMPOUND		CONCENTRATION Q
319-86-8         delta-BHC         44         U           58-89-9         gamma-BHC (Lindane)         44         U           76-44-8         Heptachlor         44         U	319-84-6	alpha-BHC		44 U
515 00 0         defta Bho           58-89-9         gamma-BHC (Lindane)         44         U           76-44-8         Heptachlor         44         U	319-85-7	beta-BHC		44 U
76-44-8         Heptachlor         44         U	319-86-8	delta-BHC		44 U
	58-89-9	gamma-BHC (Lindane)		44 U
309-00-2 Aldrin 44 U	76-44-8	Heptachlor		· 44 U
	309-00-2	Aldrin		44U

50 05 5	gamma bite (Himadite)		
76-44-8	Heptachlor	. 44	U
309-00-2	Aldrin	44	U
1024-57-3	Heptachlor epoxide	44	U
959-98-8	Endosulfan I	44	U
60-57-1	Dieldrin	85	U
72-55-9	4,4'-DDE	. 80	JD
72-20-8	Endrin	85	U
33213-65-9	Endosulfan II	85	U
72-54-8	4,4'-DDD	260	D
1031-07-8	Endosulfan sulfate	85	U
50-29-3	4,4'-DDT	85	U
72-43-5	Methoxychlor	16	JD
53494-70-5	Endrin ketone	85	U
7421-93-4	Endrin aldehyde	85	U
5103-71-9	cis-Chlordane	44	U
5103-74-2	trans-Chlordane	29	JD
8001-35-2	Toxaphene	4400	U

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP4

Lab Name: Shealy	Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ESN	P2	
Analytical Meth					
Matrix: Soil			ID: TJ23060-011		
	30.1 (g/mL) 9				· .
Sample wt/vol:	(g/mll)				
% Solids: 42.	4	Date Recei	.ved: 10/24/2018		
GC Column: DB-3	5MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018		
GC Column · DB-X	(LB ID: 0.32 (mm)	Date Analy	vzed: 10/31/2018		
	crated: (Y/N) Y		blume: 5000	(11])	
Extract Concem	.rat.ed: (1/N)			,	
Soil Aliquot (V	/OA): (uL)		Type: SONC		
Heated Purge:	(Y/N)	Injection	Volume: <u>1.0</u>	(uL)	
Purge Volume:	(mL)	рН:	Dilution Factor: 1.0		
-	GPC,Florisil	Cleanup Fa	ctor: 2,1		
Concentration (	Jnits (ug/L, mg/L, ug/Kg):	ug/kg			An
CAS NO.	COMPOUND		CONCENTRATION	Q	12-11-18
319-84-6	alpha-BHC		4.0 0.31	JEV	14
319-85-7	beta-BHC		· 17	PB	
319-86-8	delta-BHC		1.7	J	
58-89-9	gamma-BHC (Lindane)		4.0	U	
76-44-8	Heptachlor		6.3	Р	
309-00-2	Aldrin		3.3	JP	
1024-57-3	Heptachlor epoxide		2.8	JP	
959-98-8	Endosulfan I		2.0	JP	
60-57-1	Dieldrin		13	Р	
72-55-9	4,4'-DDE		25	P	
72-20-8	Endrin		2.6	JP	
33213-65-9	Endosulfan II		7.8	U	
72-54-8	4,4'-DDD		38		
1031-07-8	Endosulfan sulfate		7.8	U	
50-29-3	4,4'-DDT			P	
72-43-5	Methoxychlor		120		
53494-70-5	Endrin ketone		2.8	JP	
7421-93-4	Endrin aldehyde		7.6	J	
5103-71-9					
	cis-Chlordane		5.2	P	
5103-74-2	cis-Chlordane trans-Chlordane		5.2	Р 	

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP4RE

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035			
Lab Code: EQI Case No.: 47927		MA No.: SDG No.:_ ESNP2			
Analytical Method: PEST		Level:			
Matrix: Soil		Lab Sample ID:			
Sample wt/vol: 30.1 (g/mL) _ g _		Lab File ID: 008F0801			
% Solids: 42.4		Date Received: 10/24/2018			
GC Column: DB-35MS ID: 0.32 (mm)		Date Extracted: 10/26/2018			
GC Column: DB-XLB ID: 0.32 (mm)					
Extract Concentrated: (Y/N) Y		Extract Volume: 5000 (uL)			
		Extraction Type: SONC			
	VOA):(uL)	Injection Volume: <u>1.0</u>	(117)		
	(Y/N)				
	(mL)	pH: Dilution Factor: 1.0			
Cleanup Types: GPC,Florisil		Cleanup Factor: 2,1			
Concentration N	Jnits (ug/L, mg/L, ug/Kg):	ug/kg			
CAS NO.	COMPOUND	CONCENTRATION	Q		
319-84-6	alpha-BHC	0.65	JP		
319-85-7	beta-BHC	22	PB		
319-86-8	delta-BHC	0.60	JP		
58-89-9	gamma-BHC (Lindane)	4.0	U		
76-44-8	Heptachlor	6.1	Р		
309-00-2	Aldrin	3.3	JP		
1024-57-3	Heptachlor epoxide	2.7	JP		
959-98-8	Endosulfan I	1.4	JP		
60-57-1	Dieldrin	11	P		
72-55-9	4,4'-DDE	26	P		
72-20-8	Endrin	7.8	U		
33213-65-9	Endosulfan II	7.8	U		
72-54-8	4,4'-DDD	35			
1031-07-8	Endosulfan sulfate	0.92	JP		
50-29-3	4,4'-DDT	30	P		
72-43-5	Methoxychlor	120			
53494-70-5	Endrin ketone	32			
7421-93-4	Endrin aldehyde	5.9	JP		
5103-71-9	cis-Chlordane	5.9	P		
5103-74-2	trans-Chlordane	6.1	Р		
8001-35-2	Toxaphene	. 400	U		

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

EPA SAMPLE NO.

ESNP5

Lab Name: Shealy Environmental Services, Inc.		Contract:_	EP-VV-14035		
Lab Code: EQI Case No.: 47927		MA No.:	SDG No.:	P2	
Analytical Met	hod: PEST		Level:		
Matrix: Soil		Lab Sample ID:			
		Lab File ID: 029F3001			
* Solids:67.				ved: 10/24/2018	
GC Column: DB-35MS ID: 0.32 (mm)		Date Extracted: 10/26/2018			
		Date Analyzed: 10/31/2018			
GC Column: DB-XLB ID: 0.32 (mm)			Extract Volume: 5000 (uL)		
Extract Concent	trated: (Y/N) <u>Y</u>				
Soil Aliquot (	VOA):(	uL)		Type: SONC	
Heated Purge:	(Y/N)		Injection	Volume: <u>1.0</u>	(uL)
Purge Volume:		mL)	рН:	Dilution Factor: <u>1.0</u>	
		Cleanup Factor: 2,1			
	Jnits (ug/L, mg/L, ug/K		ug/kg		
	· · · · · · · · · · · · · · · · · · ·	.97•			
CAS NO.	COMPOUND			CONCENTRATION	Q
319-84-6	alpha-BHC			2.5	U
319-85-7	beta-BHC			2.5 8.80	JPBU
319-86-8	delta-BHC			0.38	JP
58-89-9	gamma-BHC (Lindane)			8.6	
76-44-8	Heptachlor			1.8	JP
309-00-2	Aldrin			0.86	J
1024-57-3	Heptachlor epoxide			0.86	JP
959-98-8	Endosulfan I			0.51	JP
60-57-1	Dieldrin			7.6	Р
72-55-9	4,4'-DDE			43	
72-20-8	Endrin			0.52	JP
33213-65-9	Endosulfan II			4.9	U
72-54-8	4,4'-DDD			3.2	JP
1031-07-8	Endosulfan sulfate			1.9	JP
50-29-3	4,4'-DDT			72	
72-43-5	Methoxychlor			110	
53494-70-5	Endrin ketone			0.76	JP
7421-93-4	Endrin aldehyde			1.0	JP
5103-71-9	cis-Chlordane			0.90	JP
5103-74-2	trans-Chlordane			0.49	JP

Form 1A-OR

8001-35-2

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Toxaphene

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FORM 1A-OR ORGANIC ANALYSIS DATA SHEET

ORGANIC ANALYSIS DATA SHEET ESNP5RE TARGET ANALYTE LIST				Used		
Lab Name: Shealy Environmental Services, Inc Contract			EP-W-14035			Not Ut 00/19
		MA No.:	MA No.: SDG No.:_ ESNP2			30,19
Analytical Method: PEST						Y
Matrix: Soil		Lab Sample	∍ ID:			
	30.3 (g/mL) <b>g</b>		D:009F0901			
					-	
% Solids: 67		Date Recei	lved: 10/24/2018			
GC Column: DB-	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018			
GC Column: DB-	XLB ID: 0.32 (mm)	Date Analy	yzed: <u>11/02/2018</u>			
Extract Concen	trated: (Y/N) Y	Extract Vc	olume: 5000		(uL)	
Soil Aliquot (	VOA): (uL)	Extraction	Type: SONC			
	(Y/N)	Injection	Volume: 1.0		(uL)	
Purge Volume:_	(mL)	рН:	Dilution Facto	r: <u>1.0</u>		_
CPC Elorioil		Cleanup Fa	ctor: 2,1			
Concentration	Units (ug/L, mg/L, ug/Kg):	ug/kg				
CAS NO.	COMPOUND		CONCENTRATION	1	Q	att
319-84-6	alpha-BHC			2.5	U	aciv
319-85-7	beta-BHC		2.5	0.78	JPBV	12-11-19
319-86-8	delta-BHC			0.39	JP	
58-89-9	gamma-BHC (Lindane)			9.4		
76-44-8	Heptachlor			2.2	JP	
309-00-2	Aldrin			1.0	J	
1024-57-3	Heptachlor epoxide			0.88	JP	
959-98-8	Endosulfan I			1.1	J	
60-57-1	Dieldrin			7.8	Р	
72-55-9	4,4'-DDE			44		
72-20-8	Endrin			0.52	JP	
33213-65-9	Endosulfan II			4.9	U	
72-54-8	4,4'-DDD			3.2	JP	
1031-07-8	Endosulfan sulfate			1.8	JP	
50-29-3	4,4'-DDT			73		
72-43-5	Methoxychlor			110		
53494-70-5	Endrin ketone			28	Р	
7421-93-4	Endrin aldehyde			0.98	JP ,	

Form 1A-OR

5103-71-9

5103-74-2

8001-35-2

cis-Chlordane

Toxaphene

trans-Chlordane

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0.98

2.5

1.3

250

JP

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JP

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EPA SAMPLE NO.

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## FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP6

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035			
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2			
Analytical Method: _ PEST	Level:			
Matrix: Soil	Lab Sample ID:			
Sample wt/vol:30.8(g/mL)	Lab File ID:030F3101			
% Solids: 51.5	Date Received: 10/24/2018			
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018			
GC Column: DB-XLB ID: 0.32 (mm)	10/21/2019			
Extract Concentrated: (Y/N) Y	Extract Volume: 5000 (uL)			
Soil Aliquot (VOA): (uL)	Extraction Type: SONC			
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL			
Purge Volume: (mL)	pH: Dilution Factor: 1.0			
Cleanup Types: GPC,Florisil	Cleanup Factor: _2,1			
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg			
CAS NO. COMPOUND	CONCENTRATION Q			
CAS NO. COMPOUND				
319-84-6 alpha-BHC	3.2 U			
319-85-7 beta-BHC	3.2 1.4 JPBV			
319-86-8 delta-BHC	3.2 U			

58-89-9

76-44-8

<u>309-00-2</u> 1024-57-3

959-98-8

60-57-1

72-55-9

72-20-8

72-54-8

50-29-3

72-43-5

33213-65-9

1031-07-8

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

gamma-BHC (Lindane)

Heptachlor epoxide

Endosulfan sulfate

Heptachlor

Endosulfan I

Endosulfan II

Methoxychlor

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

Aldrin

Dieldrin

4,4'-DDE

4,4'-DDD

4,4'-DDT

Endrin

actt 12-11-18 7.9 3.2 U 3.2 U 0.69 JΡ 3.2 U 7.1 Ρ 10 2.3 JP 14 Ρ

1.5

2.7

21

150

43

2.9

3.2

3.2

320

JP

JP

Ρ

JP

U

U

U

Form 1A-OR HRS Page Number 288 SOM02.4 (10/2016) 1852 of 2916

FORM 1A-OR ORGANIC ANALYSIS DATA SHEET 

TARGET ANALYTE LIST	ESNF	NSEL
Lab Name: Shealy Environmental Services, Inc. Contract	EP-W-14035	Noiott
Lab Code: <u>EQI</u> Case No.: <u>47927</u> MA No.: _	SDG No.: ESN	
Analytical Method: PEST Level:		
Matrix: Soil Lab Samp	Le ID:	
	ID: 010F1001 ·····	· · · · · ·
	eived: <u>10/24/2018</u>	
GC Column: DB-35MS ID: 0.32 (mm) Date Extr		
	Lyzed:11/02/2018	n
	Volume: 5000	(uL)
Soil Aliquot (VOA): (uL) Extraction Type: SONC		
	Dilution Factor: 1.0	
	- 'actor: 2,1	
Concentration Units (ug/L, mg/L, ug/Kg): ug/kg		
	<ul> <li>The second se</li></ul>	
CAS NO. COMPOUND	CONCENTRATION	e not
319-84-6 alpha-BHC	3.2	U 12-11-F
319-85-7 beta-BHC	3.2 0.82	JPBU 10-
319-86-8 delta-BHC	0.64	JP
58-89-9 gamma-BHC (Lindane)	3.2	U
76-44-8 Heptachlor	3.2	U
309-00-2 Aldrin	3.2	U
1024-57-3 Heptachlor epoxide	0.67	JP
959-98-8 Endosulfan I	3.2	U
60-57-1 Dieldrin	4.8	JP
72-55-9 4,4'-DDE	11	
72-20-8 Endrin	2.4	JP .
33213-65-9 Endosulfan II	14	P
72-54-8 4,4'-DDD	1.4	JP
1031-07-8 Endosulfan sulfate	2.6	JP
50-29-3 4,4'-DDT	22	
72-43-5 Methoxychlor	150	
53494-70-5 Endrin ketone	48	
7421-93-4 Endrin aldehyde	2.7	JP
5103-71-9 cis-Chlordane	0.42	JP
5103-74-2 trans-Chlordane	3.2	U
8001-35-2 Toxaphene	320	U

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EPA SAMPLE NO.

ESNP6RE

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP7

Lab Name: Shealy	/ Environmental Services, Inc.	Contract: EP-W-14035			
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.:	P2	
Analytical Meth					
Matrix: Soil			ID: TJ23060-014		
	30.6 (g/mL) <b>g</b>		D: 031F3201		·
-					
% Solids: <u>72</u> .			ved: 10/24/2018		
GC Column: DB-3	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018		
GC Column: DB-X	(LB ID: 0.32 (mm)	Date Analy	/zed: 10/31/2018	·	
Extract Concent	trated: (Y/N) Y	Extract Vo	blume: 5000	(uL)	
	VOA):(uL)		Type: SONC		
			Volume: 1.0	(11T.)	
	(Y/N)	-			
-	(mL)		Dilution Factor: <u>1.0</u>		
Cleanup Types:	GPC,Florisil	Cleanup Fa	actor: _2,1		
Concentration 0	Jnits (ug/L, mg/L, ug/Kg):	ug/kg	······		
	CONDOLIND			0	N
CAS NO.	COMPOUND		CONCENTRATION	Q	- OIL
1					act
319-84-6	alpha-BHC		2.3	U	actt
319-85-7	beta-BHC		2.3 0.96	JPBV	12-11-15
319-85-7 319-86-8	beta-BHC delta-BHC	·	2.3 0.96 0.47	JPE V JP	12-11-12
319-85-7 319-86-8 58-89-9	beta-BHC delta-BHC gamma-BHC (Lindane)		2.3 0.96 0.47 15	JPBV JP P	actt 12-11-18
319-85-7 319-86-8 58-89-9 76-44-8	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor		2.3 0.96 0.47 15 1.5	JPEV JP P JP	12-11-12
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin		2.3 0.96 0.47 15 1.5 2.3	JPEV JP JP JP U	12-11-18
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide	•	2.3 0.96 0.47 15 1.5 2.3 1.5	JPEV JP P JP U JP	12-11-18
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67	JPEV JP JP U JP JP JP	12-11-18
319-85-7 $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8	JPEV JP JP U JP JP JP P	12-11-18
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7	JPEV JP JP U JP JP JP	12-11-18
319-85-7 $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin	•	2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0	JPEV JP JP U JP JP JP P	12-11-18
319-85-7 $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5	JPEV JP JP U JP JP JP P P	12-11-18
319-85-7 $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$ $72-54-8$	beta-BHC delta-BHC qamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71	JPEV JP JP U JP JP JP P P JP JP U JP	12-11-18
319-85-7 $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4	J₽BV JP P JP JP JP JP P JP JP U	12-11-18
$\begin{array}{r} 319-85-7\\ 319-86-8\\ 58-89-9\\ 76-44-8\\ 309-00-2\\ 1024-57-3\\ 959-98-8\\ 60-57-1\\ 72-55-9\\ 72-20-8\\ 33213-65-9\\ 72-54-8\\ 1031-07-8\\ 50-29-3\\ \end{array}$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4 25	JPEV JP JP U JP JP JP P P JP JP U JP	12-11-18
319-85-7 $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$ $72-54-8$ $1031-07-8$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4	JPEV JP JP U JP JP JP P P JP JP U JP	12-11-18
$\begin{array}{r} 319-85-7\\ 319-86-8\\ 58-89-9\\ 76-44-8\\ 309-00-2\\ 1024-57-3\\ 959-98-8\\ 60-57-1\\ 72-55-9\\ 72-20-8\\ 33213-65-9\\ 72-54-8\\ 1031-07-8\\ 50-29-3\\ \end{array}$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4 25 170 2.4	JPEV JP JP U JP JP JP P P JP JP U JP	act 12-11-12
$\begin{array}{r} 319-85-7\\ 319-86-8\\ 58-89-9\\ 76-44-8\\ 309-00-2\\ 1024-57-3\\ 959-98-8\\ 60-57-1\\ 72-55-9\\ 72-20-8\\ 33213-65-9\\ 72-54-8\\ 1031-07-8\\ 50-29-3\\ 72-43-5\\ \end{array}$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4 25 170	JPEV JP U JP U JP P P P JP U JP U JP U JP	12-11-18
$\begin{array}{r} 319-85-7\\ 319-86-8\\ 58-89-9\\ 76-44-8\\ 309-00-2\\ 1024-57-3\\ 959-98-8\\ 60-57-1\\ 72-55-9\\ 72-20-8\\ 33213-65-9\\ 72-54-8\\ 1031-07-8\\ 50-29-3\\ 72-43-5\\ 53494-70-5\\ \end{array}$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor Endrin ketone		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4 25 170 2.4	JPEBV JP U JP U JP P P JP U JP U JP U JP U JP	12-11-18
$\begin{array}{r} 319-85-7\\ 319-86-8\\ 58-89-9\\ 76-44-8\\ 309-00-2\\ 1024-57-3\\ 959-98-8\\ 60-57-1\\ 72-55-9\\ 72-20-8\\ 33213-65-9\\ 72-54-8\\ 1031-07-8\\ 50-29-3\\ 72-43-5\\ 53494-70-5\\ 7421-93-4\\ \end{array}$	beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor Endrin ketone Endrin aldehyde		2.3 0.96 0.47 15 1.5 2.3 1.5 0.67 9.8 8.7 1.0 4.5 0.71 3.4 25 170 2.4 1.5	J₽BV JP U JP JP P P P JP U JP JP JP JP JP JP	act 12-11-12

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# FORM 1A-OR ORGANIC ANALYSIS DATA SHEET

	ORGANIC ANALYSI TARGET ANAI		ESNP7	7MS(1)	Not Used
Lab Name: Sheal	y Environmental Services, Inc.	Contract:	EP-W-14035		Not 4 19
Lab Code: EQI	Case No.: <u>47927</u>	MA No.:	SDG No.: ESN	P2	Not 02-19 action 19
Analytical Met	hod:	Level:			
Matrix: Soil		Lab Sample	= ID:		
	<b>30.2</b> (g/mL) <b>9</b>				··· · ·
% Solids: 72.					
	35MS ID: 0.32 (mm)			· · · · · · · · · · · · · · · · · · ·	
GC Column: DB->	<b>KLB</b> ID: 0.32 (mm)	Date Analy	yzed: 10/31/2018		
Extract Concen	trated: (Y/N) Y	Extract Vo	olume: <u>5000</u>	(uL)	
Soil Aliquot (	VOA): (uL)	Extraction	Type: SONC		
	(Y/N)	Injection	Volume: 1.0	(uL)	
	(mL)		Dilution Factor: 1.0		
-	GPC,Florisil		actor: 2,1		-
		ug/kg		*··	
	Jnits (ug/L, mg/L, ug/Kg):				
CAS NO.	COMPOUND		CONCENTRATION	Q	at
319-84-6	alpha-BHC		2.3	U	12-11-18
319-85-7	beta-BHC		2.3 0.51	JPB U	12
319-86-8	delta-BHC		0.36	JP	
58-89-9	gamma-BHC (Lindane)		12	Р	
76-44-8	Heptachlor		19	Р	
309-00-2	Aldrin		13		
1024-57-3	Heptachlor epoxide		4.3	Р	
959-98-8	Endosulfan I		1.2	JP	
60-57-1	Dieldrin		57	P	
72-55-9	4,4'-DDE		8.6	Р	
72-20-8	Endrin		36	Р	
33213-65-9	Endosulfan II		14	Р	
72-54-8	4,4'-DDD		2.3	JP	
1031-07-8	Endosulfan sulfate		3.2	JP	
50-29-3	4,4'-DDT		64		
72-43-5					
53494-70-5	Methoxychlor		160		
	Methoxychlor Endrin ketone		49	Р	
7421-93-4				P P	
7421-93-4 5103-71-9	Endrin ketone		49		
	Endrin ketone Endrin aldehyde		49 10	Р	

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EPA SAMPLE NO.

	FORM 1.	A-OR	EPA SAMP	LE NO.	
	ORGANIC ANALYS		ESNP7	MS(2)	1
	TARGET ANAI	LYTE LIST			
Lab Name: Shealy	Environmental Services, Inc.	Contract: EP-W-14035		ĥ	A LA
	Case No.: 47927	MA No.: SD0	G No.:ESNF	2	an April
		Level:			15
Analytical Meth					
Matrix: Soil		Lab Sample ID:	00-0141013		
Sample wt/vol:	30.2 (g/mL) <u>9</u>	Lab File ID:032F3	301	··· ·	• • •
% Solids: 72.6	3	Date Received:10/24	/2018		
GC Column: DB-3	5MS ID: 0.32 (mm)	Date Extracted: 10/26	6/2018		
	LB ID: 0.32 (mm)	Date Analyzed:10/31	/2018		
	trated: (Y/N) Y	Extract Volume: 500		(uL)	
		Extraction Type: SO			
	70A): (uL)				
Heated Purge:	(Y/N)	Injection Volume: <u>1</u>			
-	(mL)	pH: Dilution	Factor: 1.0		
Cleanup Types:	GPC,Florisil	Cleanup Factor: 2,1			
	Jnits (ug/L, mg/L, ug/Kg):	ug/kg	-		
				· · [	
CAS NO.	COMPOUND	CONCENT	RATION	Q	a a i à
319-84-6	alpha-BHC		2.3	U	ack
319-85-7	beta-BHC		2.3 1.0	JPBU	12-11-18
319-86-8	delta-BHC		1.0	JP	
58-89-9	gamma-BHC (Lindane)		19	P	
76-44-8	Heptachlor		14	Р	
309-00-2	Aldrin		12		
1024-57-3	Heptachlor epoxide		1.3	JP	
959-98-8	Endosulfan I		0.56	JP	
60-57-1	Dieldrin		36	Р	
72-55-9	4,4'-DDE		11	Р	
72-20-8	Endrin		47	Р	
33213-65-9	Endosulfan II		5.4	P	
72-54-8	4,4'-DDD		0.79	JP	
1031-07-8	Endosulfan sulfate		5.3	P	
50-29-3	4,4'-DDT		59		
72-43-5	Methoxychlor		140		
53494-70-5	Endrin ketone		3.3	JP ,	
7421-93-4	Endrin aldehyde		1.3	JP 、	
5103-71-9	cis-Chlordane		2.8	Р	

5103-74-2

8001-35-2

trans-Chlordane

Toxaphene

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	FORM 1 ORGANIC ANALYS		EPA SAM	
	TARGET ANA		ESNP:	MSD(1)
Lab Name: Shea	y Environmental Services, Inc.	Contract:	EP-W-14035	N# 18ed 0.04 1/32'
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: _ESI	1P2 1 <sup>30</sup>
Analytical Met	hod: PEST			
Matrix: Soil		Lab Sample	e ID: TJ23060-014MD	
Martin Children and Children an	30.2 (g/mL) g		ID:033F3401	
<pre>% Solids: 72</pre>				
			ived: 10/24/2018	
GC Column: DB-	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018	
GC Column: DB-	XLB ID: 0.32 (mm)	Date Analy	yzed: <u>10/31/2018</u>	
Extract Concen	trated: (Y/N) Y	Extract Vo	plume: 5000	(uL)
Soil Aliquot (	VOA):(uL)	Extraction	Type: SONC	
	(Y/N)	Injection	Volume: 1.0	(uL)
Purge Volume:_	(mL)	pH:	Dilution Factor: 1.0	
Cleanup Types:	GPC,Florisil		actor: 2,1	
	Units (ug/L, mg/L, ug/Kg):	ug/kg		
	· · · · · · · · · · · · · · · · · · ·			
CAS NO.	COMPOUND		CONCENTRATION	Q
319-84-6	alpha-BHC	,	2.3	U
319-85-7	beta-BHC		2.3	<u> </u>
319-86-8	delta-BHC		0.42	JP
58-89-9	gamma-BHC (Lindane)		12	P
76-44-8	Heptachlor		21	P
309-00-2	Aldrin		14	
1024-57-3	Heptachlor epoxide		1.8	JP
959-98-8	Endosulfan I		1.1	JP
60-57-1	Dieldrin		63	P
72-55-9	4,4'-DDE		8.2	P
72-20-8	Endrin		33	P
33213-65-9	Endosulfan II		4.5	U
72-54-8	4,4'-DDD		3.0	JP
1031-07-8	Endosulfan sulfate		2.9	JP
50-29-3	4,4'-DDT		74	<u> </u>
72-43-5	Methoxychlor		190	
53494-70-5	Endrin ketone		55	P
7421-93-4	Endrin aldehyde		11	P
5103-71-9	cis-Chlordane		0.72	JP
5103-74-2	trans-Chlordane		2.3	U

8001-35-2

Toxaphene

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Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-14035 Lab Code: EQI Case No.: 47927 MA No.: \_\_\_\_\_ SDG No.: \_ESNP2 Analytical Method: PEST Level: Lab Sample ID: TJ23060-014MD Matrix: Soil Lab File ID: 033F3401 Sample wt/vol: 30.2 (g/mL) 9 % Solids: 72.6 Date Received: 10/24/2018 GC Column: DB-35MS ID: 0.32 (mm) Date Extracted: 10/26/2018 Date Analyzed: \_\_\_\_10/31/2018 GC Column: DB-XLB ID: 0.32 (mm) Extract Concentrated: (Y/N) Y Extract Volume: 5000 (uL) Extraction Type: SONC Soil Aliquot (VOA): \_\_\_\_\_ (uL) Injection Volume: <u>1.0</u> Heated Purge: (Y/N)\_\_\_\_\_ \_\_\_\_ (uL) pH: \_\_\_\_\_ Dilution Factor: 1.0 (mL) Purge Volume: \_\_\_\_ Cleanup Types: GPC,Florisil Cleanup Factor: 2,1 ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	1.0	JP
58-89-9	gamma-BHC (Lindane)	17	P
76-44-8	Heptachlor	15	Р
309-00-2	Aldrin	13	
1024-57-3	Heptachlor epoxide	1.4	JP
959-98-8	Endosulfan I	0.50	JP
60-57-1	Dieldrin	39	P
72-55-9	4,4'-DDE	11	Р
72-20-8	Endrin	52	P
33213-65-9	Endosulfan II	4.5	U
72-54-8	4,4'-DDD	0.74	JP
1031-07-8	Endosulfan sulfate	6.3	Р
50-29-3	4,4'-DDT	68	
72-43-5	Methoxychlor	160	b.
53494-70-5	Endrin ketone	2.3	JP .
7421-93-4	Endrin aldehyde	1.4	JP
5103-71-9	cis-Chlordane	3.2	Р
5103-74-2	trans-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U

Form 1A-OR

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EPA SAMPLE NO. ESNP7MSD(2)

# FORM 1A-OR ORGANIC ANALYSIS DATA SHEET

	ORGANIC ANALYSI TARGET ANAL		ESNF	P7RE
Lab Name: Sheal	y Environmental Services, Inc.	Contract:	EP-W-14035	Not ct
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ESN	
Analytical Met				
Matrix: Soil				
			DID:	
Sample wt/vol:	30.6 (g/mL) <u>9</u>	Lab File 1	D: 011F1101	• • • • • • • •
% Solids: <u>72</u>	6	Date Recei	ved: 10/24/2018	
GC Column: DB-:	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018	
GC Column: DB->	KLB ID: 0.32 (mm)	Date Analy	/zed: <u>11/02/2018</u>	
	trated: (Y/N) Y	1	blume: 5000	(uL)
	The second s			
	VOA):(uL)		Type: SONC	
	(Y/N)		Volume: <u>1.0</u>	
	(mL)	рН:	Dilution Factor: <u>1.0</u>	
Cleanup Types:	GPC,Florisil	Cleanup Fa	.ctor: 2,1	
Concentration	Jnits (ug/L, mg/L, ug/Kg):	ug/kg		
CAS NO.	COMPOUND		CONCENTRATION	0
319-84-6	alpha-BHC		2.3	U
319-85-7	beta-BHC		2.3	U
319-86-8	delta-BHC		0.48	JP
58-89-9	gamma-BHC (Lindane)		19	P
76-44-8	Heptachlor		1.7	JP
309-00-2	Aldrin		0.52	JP
1024-57-3	Heptachlor epoxide		1.7	JP
959-98-8	Endosulfan I		0.88	JP
60-57-1	Dieldrin		11	P
72-55-9	4,4'-DDE		9.3	Р
72-20-8	Endrin		1.5	JP
33213-65-9	Endosulfan II		4.5	U
72-54-8	4,4'-DDD		0.55	JP
1031-07-8	Endosulfan sulfate		3.6	JP
50-29-3	4,4'-DDT		26	
72-43-5	Methoxychlor		180	

53

1.5

1.7

0.42

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EPA SAMPLE NO.

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53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

EFA SAMFLE NU.

ESNP7REMS(1)

Lab Name: Sheal	y Environmental Services, Inc.		Contract:	EP-W-14035	
Lab Code: EQI	Case No.: 47927		MA No.:	SDG No.: _ESN	IP2
Analytical Met	hod: PEST		Level:		
Matrix: Soil			Lab Sample	TJ23060-014MS	
Sample wt/vol:	30.2 (g/mL) 9			D: 012F1201	· · · ·
% Solids: 72					
	······································		Date Recei	ved: 10/24/2018	
GC Column: DB-3	35MS ID: 0.32	( mm )	Date Extra	acted: 10/26/2018	
GC Column: DB-)	(LB ID: 0.32	(mm)	Date Analy	zed:11/02/2018	
Extract Concen	trated: (Y/N) Y		Extract Vo	lume: 5000	(uL)
Soil Aliquot ('	VOA):	(uL)		Type: SONC	
	(Y/N)			Volume: 1.0	(uL)
				Dilution Factor: 1.0	
Cleanup Types:		(1112)		•	
creanup Types:			Cleanup Fa	ctor: _2,1	
Concentration N	Jnits (ug/L, mg/L, ug/	Kg):	ug/kg		
CAS NO.	COMPOUND			CONCENTRATION	Q
319-84-6	alpha-BHC	an and		2.3	U
319-85-7	beta-BHC			2.3	U
319-86-8	delta-BHC			0.35	JP
58-89-9	gamma-BHC (Lindane)			11	P
76-44-8	Heptachlor			21	P
309-00-2	Aldrin			14	
1024-57-3	Heptachlor epoxide			1.7	J
959-98-8	Endosulfan I			0.95	JP
60-57-1	Dieldrin			64	Р
72-55-9	4,4'-DDE			8.9	Р
72-20-8	Endrin			32	P
33213-65-9	Endosulfan II			14	P
72-54-8	4,4'-DDD			16	 P
1031-07-8	Endosulfan sulfate			3.1	JP
50-29-3	4,4'-DDT			62	
72-43-5	Methoxychlor			180	

Form 1A-OR

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

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49

12

1.1

230

0.34

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JP

JP

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP7REMS(2)

ab Name: Shealy Environmental Services, Inc.			Contract: EP-W-14035
Lab Code: <u>EQI</u>	Case No.: 47927		MA No.: SDG No.: _ESNP2
Analytical Metl	hod: PEST		Level:
Matrix: Soil			Lab Sample ID:
	<b>30.2</b> (g/mL) <b>9</b>		Lab File ID: 012F1201
% Solids: 72.			Date Received: 10/24/2018
	35MS ID: 0.32 (n	 nm )	Date Extracted: 10/26/2018
		ım)	Date Analyzed:11/02/2018
	trated: (Y/N) Y		Extract Volume: 5000 (uI
			Extraction Type: SONC
	VOA): (u		Injection Volume: <u>1.0</u> (ul
	(Y/N)		
-	(m	ιL)	pH: Dilution Factor: 1.0
Cleanup Types:	GPC,Florisil		Cleanup Factor: _2,1
Concentration	Units (ug/L, mg/L, ug/Kg	ī):	ug/kg
CAS NO.	COMPOUND		CONCENTRATION Q
319-84-6	alpha-BHC		2.3 U
319-85-7	beta-BHC		2.3 U
319-86-8	delta-BHC		1.0 JP
58-89-9	gamma-BHC (Lindane)		18 P
76-44-8	Heptachlor		14 P
309-00-2	Aldrin		13
1024-57-3	Heptachlor epoxide		1.5 J
959-98-8	Endosulfan I		0.63 JP
60-57-1	Dieldrin		38 P
72-55-9	4,4'-DDE		12 P
72-20-8	Endrin		49 P
33213-65-9	Endosulfan II		5.6 P

4,4'-DDD

4,4'-DDT

Methoxychlor

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

Endosulfan sulfate

72-54-8

50-29-3

72-43-5

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

1031-07-8

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0.76

8.3

61

43

1.3

2.8

230

20

150

JP

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JP

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EPA SAMPLE NO.

ESNP7REMSD(1)

Lab Name: Shealy Environmental Services, Inc.		Contract: EP-W-14035
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.:_ESNP2
Analytical Met		Level:
Matrix: Soil		Lab Sample ID: TJ23060-014MD
Sample wt/vol:	30.2 (g/mL) g	Lab File ID: 013F1301
% Solids: 72.	6	Date Received:
GC Column: DB-3	35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: DB->	(LB ID: 0.32 (mm)	Date Analyzed: <u>11/02/2018</u>
	trated: (Y/N) Y	Extract Volume: 5000 (uL)
	VOA): (uL)	Extraction Type: SONC
	(Y/N)(UI)	Injection Volume: <u>1.0</u> (uL)
	((mL)	pH: Dilution Factor: <u>1.0</u>
-	GPC,Florisil	
		Cleanup Factor: 2,1
Concentration (	Jnits (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO.	COMPOUND	CONCENTRATION Q
319-84-6	alpha-BHC	2.3 U
319-85-7	beta-BHC	2.3 U
319-86-8	delta-BHC	0.43 JP
58-89-9	gamma-BHC (Lindane)	14 P
76-44-8	Heptachlor	12 P
309-00-2	Aldrin	15
1024-57-3	Heptachlor epoxide	0.83 JP
959-98-8	Endosulfan I	1.1 JP
60-57-1	Dieldrin	71 P
72-55-9	4,4'-DDE	8.6 P
72-20-8	Endrin	43 P
33213-65-9	Endosulfan II	4.5 U
72-54-8	4,4'-DDD	5.6 P
1031-07-8	Endosulfan sulfate	2.8 JP
50-29-3	4,4'-DDT	83 E
72-43-5	Methoxychlor	200
53494-70-5	Endrin ketone	58 P
7421-93-4	Endrin aldehyde	14 P
5103-71-9	cis-Chlordane	1.7 JP
5103-74-2	trans-Chlordane	0.72 JP
8001-35-2	Toxaphene	230 U

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP7REMSD(2)

Lab Name: Sheal	y Environmental Services, Inc.		Contract: <u>EP-W-14035</u>			
Lab Code: EQI	Case No.: 47927		MA No.:	SDG No.:ESI	NP2	
Analytical Met	hod: PEST		Level:			
Matrix: Soil			Lab Sample ID:	TJ23060-014MD		
	30.2 (g/mL) 9		Lab File ID:	013F1301 ·· ··		
% Solids: 72.	6		Date Received:	10/24/2018		
GC Column: DB-3	35MS ID: 0.32	(mm)	Date Extracted	: 10/26/2018		
GC Column: DB->	KLB ID: 0.32	(mm)	Date Analyzed:	11/02/2018		
Extract Concen	trated: (Y/N) Y		Extract Volume	:	(uL)	
Soil Aliquot (	VOA):	(uL)	Extraction Typ	e:SONC		
Heated Purge:	(Y/N)		Injection Volu	me:1.0	(uL)	
Purge Volume:		(mL)	pH: Dil	ution Factor: <u>1.0</u>		
Cleanup Types:	GPC,Florisil		Cleanup Factor	: _2,1		
	Units (ug/L, mg/L, ug	/Kg):	ug/kg			
CAS NO.	COMPOUND		CC	ONCENTRATION	Q	
210 04 6	almha BUC			2 3	TT	

CAS NO.	COMPOUND	CONCENTRATION	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	1.0	JP
58-89-9	gamma-BHC (Lindane)	18	P
76-44-8	Heptachlor	16	P
309-00-2	Aldrin	14	
1024-57-3	Heptachlor epoxide	1.5	JP
959-98-8	Endosulfan I	0.71	JP
60-57-1	Dieldrin	42	Р
72-55-9	4,4'-DDE	12	P
72-20-8	Endrin	54	Р
33213-65-9	Endosulfan II	4.5	U
72-54-8	4,4'-DDD	0.80	JP
1031-07-8	Endosulfan sulfate	7.1	P
50-29-3	4,4'-DDT	70	
72-43-5	Methoxychlor	170	
53494-70-5	Endrin ketone	37	Р
7421-93-4	Endrin aldehyde	1.5	JP
5103-71-9	cis-Chlordane	3.2	P
5103-74-2	trans-Chlordane	23	P
8001-35-2	Toxaphene	230	U

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ORGANIC	ANA	LYSIS	DÆ	ATA	SHEET
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BLA DAMELLE INV.

ESNP8

Lab Name: Shea	y Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: _ ESN	IP2	
Analytical Met					
Matrix: Soil		Lab Sample	e ID:		
Sample wt/vol:	30.4 (g/mL) g			•• ••	•• •·
% Solids:70	.2	Date Rece	ived:10/24/2018		
GC Column: DB-	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018		
GC Column: DB-	XLB ID: 0.32 (mm)	Date Anal	yzed: 10/31/2018		
	trated: (Y/N) Y		5000	(uL)	
	VOA):(uL)		n Type: SONC		
	(Y/N)		Volume: 1.0	(uL)	
	(mL)		Dilution Factor: 1.0		
Cleanup Types:			actor: 2,1		•
	Units (ug/L, mg/L, ug/Kg):	ug/kg			
<b>Г</b>			ГГ		
CAS NO.	COMPOUND		CONCENTRATION	Q	t-
319-84-6	alpha-BHC		2.4	U	acra,
319-85-7	beta-BHC		2.4 0.53	JPBU	12-11-19
319-86-8	delta-BHC		0.32	JP	1.
58-89-9	gamma-BHC (Lindane)		6.0	Р	
76-44-8	Heptachlor		1.3	JP	
309-00-2	Aldrin		2.4	U	
1024-57-3	Heptachlor epoxide		0.39	JP	
959-98-8	Endosulfan I		0.37	JP	
60-57-1	Dieldrin		6.3	·P	
72-55-9	4,4'-DDE		250	E	
72-20-8	Endrin		1.3	JP	
33213-65-9	Endosulfan II		4.6	U	
72-54-8	4,4'-DDD		4.7		
1031-07-8	Endosulfan sulfate		5.5	Р	
50-29-3	4,4'-DDT		260	Е	
72-43-5	Methoxychlor		65		
53494-70-5	Endrin ketone		0.85	JP	
7421-93-4	Endrin aldehyde		8.1		
5103-71-9	cis-Chlordane		2.4	υ	
5103-74-2	trans-Chlordane			TT	
	crano ontorauno	1	2.4	U	

Form 1A-OR

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP8DL

Lab Name: Sheal	y Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Met	hod: PEST	Level:
Matrix: Soil		Lab Sample ID:
	<b>30.4</b> (ġ/mL) <b>g</b>	Lab File ID: 015F1501
<pre>% Solids: 70</pre>		Date Received: 10/24/2018
	35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
	XLB ID: 0.32 (mm)	Date Analyzed: 11/02/2018
•••••••••••••••••	trated: (Y/N) Y	Extract Volume: 5000 (uL)
	VOA):(uL)	Extraction Type: SONC
	(Y/N)	Injection Volume: <u>1.0</u> (uL)
	(mL)	pH: Dilution Factor: 10.0
-	GPC,Florisil	Cleanup Factor: 2,1
	Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO.	COMPOUND	CONCENTRATION Q
319-84-6	alpha-BHC	24 U
319-85-7	beta-BHC	24 U
319-86-8	delta-BHC	24 U
58-89-9	gamma-BHC (Lindane)	6.1 J D
76-44-8	Heptachlor	24 U
309-00-2	Aldrin	24 U
1024-57-3	Heptachlor epoxide	24 U
959-98-8	Endosulfan I	24 U
60-57-1	Dieldrin	46 U
72-55-9	4,4'-DDE	230 D
72-20-8	Endrin	3.5 J DP

33213-65-9

1031-07-8

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

72-54-8

50-29-3

72-43-5

Endosulfan II

Methoxychlor

Endrin ketone

cis-Chlordane

Endrin aldehyde

trans-Chlordane

Endosulfan sulfate

4,4'-DDD

4,4'-DDT

Toxaphene

Form 1A-OR

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J DP

J DP

JD

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EPA SAMPLE NO.

ESNP9

Lab Name: Sheal	y Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ESN	P2	
Analytical Met					
		·			
Matrix: Soil			e ID:		
Sample wt/vol:	30.7 (g/mL)_9	Lab File	ID:020F2101	•••••••	••
% Solids: 77	.6	Date Rece	ived: 10/24/2018		
GC Column: DB-	35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018		
GC Column · DB-)	XLB ID: 0.32 (mm)	Date Analy	yzed: 10/31/2018		
				· - ·	
Extract Concen	trated: (Y/N) Y	Extract Vo	olume: <u>5000</u>	(uL)	
Soil Aliquot (	VOA):(uL)	Extractior	n Type: SONC		
Heated Purge:	(Y/N)	Injection	Volume: 1.0	(uL)	
Purge Volume:	(mL)	:Ha	Dilution Factor: <u>1.0</u>		
	GPC,Florisil		actor: 2,1		
		-	iccor. <u></u> ,		
Concentration	Units (ug/L, mg/L, ug/Kg):	ug/kg			
CAS NO.	COMPOUND	•	CONCENTRATION	Q	00
319-84-6	alpha-BHC		2.1	U	a
319-85-7	beta-BHC		2.1 1.1	JPBV	12.
319-86-8	delta-BHC		0.84	J	
58-89-9	gamma-BHC (Lindane)		2.1	U	
76-44-8	Heptachlor		2.1	U	
309-00-2	Aldrin		2.1	U	
1024-57-3	Heptachlor epoxide		2.1	U	
959-98-8	Endosulfan I		0.54	JP	
60-57-1	Dieldrin		1.3	JP	
72-55-9	4,4'-DDE		0.52	J	
72-20-8	Endrin		4.2	U	
33213-65-9	Endosulfan II		4.2	U	
72-54-8	4,4'-DDD		4.2	U	
1031-07-8	Endosulfan sulfate		4.2	U	•
50-29-3	4,4'-DDT		4.2	U	
72-43-5	Methoxychlor	·	2.6	J	
F2404 70 F					
53494-70-5	Endrin ketone		4.2	U	
7421-93-4	Endrin ketone Endrin aldehyde		4.2	<u>ט</u> ט	
7421-93-4	Endrin aldehyde		4.2	U	

Form 1A-OR

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ0

Lab Name: She	aly Environmental Services, Inc.	Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: _ESN	IP2	
Analytical Me	1				
			e ID: <b>TJ23060-017</b>		
	: 30.9 (g/mL) 9		ID: 035F3601	·····	
% Solids: 6			ived: 10/24/2018		
	<b>3-35MS</b> ID: <b>0.32</b> (mm)		acted: 10/26/2018		
	3-XLB ID: 0.32 (mm)		yzed: 10/31/2018		
Extract Conce	ntrated: (Y/N) Y	Extract V	olume: <u>5000</u>	(uL)	
Soil Aliquot	(VOA): (uL)	Extraction	n Type: SONC		
	(Y/N)	Injection	Volume: 1.0	(uL)	
	(mL)	рН <b>:</b>	Dilution Factor: <u>1.0</u>		_
-	:GPC,Florisil		actor: 2,1		
Concentration	Units (ug/L, mg/L, ug/Kg):	ug/kg			
CAS NO.	COMPOUND		CONCENTRATION	Q	ň
319-84-6	alpha-BHC		2.4	U	ac
319-85-7	beta-BHC		2.4 7.3	JPB V	122
319-86-8	delta-BHC		0.41	JP	1
58-89-9	gamma-BHC (Lindane)		8.3	P	1
76-44-8	Heptachlor		1.8	JP	
309-00-2	Aldrin		0.28	JP	
1024-57-3	Heptachlor epoxide		0.83	JP	
959-98-8	Endosulfan I		1.3	J	
60-57-1	Dieldrin		7.9	P	
72-55-9	4,4'-DDE		41		
72-20-8	Endrin		0.92	JP	
33213-65-9	Endosulfan II		2.7	JP	
72-54-8	4,4'-DDD		4.3	J	
1031-07-8	Endosulfan sulfate		1.8	JP	
50-29-3	4,4'-DDT		56		
72-43-5	Methoxychlor		130		
53494-70-5	Endrin ketone		5.4	P	
7421-93-4	Endrin aldehyde		9.7		
5103-71-9	cis-Chlordane		2.0	JP	
5103-74-2	trans-Chlordane		0.41	J	
8001-35-2	Toxaphene		240	U	

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	FORM 1A-	OR	
ORGANIC .	ANALYSIS	DATA	SHEET
TARG	ET ANALYI	TE LIS	ST

Lab Name:Shealy Environmental Services, Inc.Contract:EP-W-14035Lab Code:EQICase No.:47927MA No.:SDG No.:ESNP2Analytical Method:PESTLevel:	Not year
Analytical Method: PEST       Level:         Matrix: Soil       Lab Sample ID: TJ23060-017         Sample wt/vol:       30.9 (g/mL) g         Lab Sample ID:       016F1601         % Solids:       67.7         GC Column:       DB-35MS         ID:       0.32         (mm)       Date Extracted:         10/26/2018         GC Column:       DB-XLB         ID:       0.32         (mm)       Date Analyzed:         11/02/2018         Extract Concentrated:       (Y/N)         Y       Extract Volume:         Soil Aliquot (VOA):       (uL)         Heated Purge:       (Y/N)         Purge Volume:       (mL)         pH:       Dilution Factor:	0.0 X V <sup>30</sup>
Matrix:       Soil       Lab Sample ID:       TJ23060-017         Sample wt/vol:       30.9 (g/mL) g       Lab File ID:       016F1601         % Solids:       67.7       Date Received:       10/24/2018         GC Column:       DB-35MS       ID:       0.32 (mm)       Date Extracted:       10/26/2018         GC Column:       DB-XLB       ID:       0.32 (mm)       Date Analyzed:       11/02/2018         Soil Aliquot (VOA):       (uL)       Extract Volume:       5000 (uL)         Soil Aliquot (VOA):       (uL)       Extraction Type:       SONC         Heated Purge:       (Y/N)       Injection Volume:       1.0 (uL)         Purge Volume:       (mL)       pH:       Dilution Factor:       1.0	
Sample wt/vol:       30.9       (g/mL) g       Lab File ID:       016F1601         % Solids:       67.7       Date Received:       10/24/2018         GC Column:       DB-35MS       ID:       0.32       (mm)         GC Column:       DB-XLB       ID:       0.32       (mm)         GC Column:       DB-XLB       ID:       0.32       (mm)         Extract Concentrated:       (Y/N)       Y       Extract Volume:       5000       (uL)         Soil Aliquot (VOA):       (uL)       Extraction Type:       SONC       SONC         Heated Purge:       (Y/N)       (mL)       pH:       Dilution Factor:       1.0	
Sample wt/vol:       30.9       (g/mL) g       Lab File ID:       016F1601         % Solids:       67.7       Date Received:       10/24/2018         GC Column:       DB-35MS       ID:       0.32       (mm)         GC Column:       DB-XLB       ID:       0.32       (mm)         GC Column:       DB-XLB       ID:       0.32       (mm)         Extract Concentrated:       (Y/N)       Y       Extract Volume:       5000       (uL)         Soil Aliquot (VOA):       (uL)       Extraction Type:       SONC       SONC         Heated Purge:       (Y/N)       (mL)       pH:       Dilution Factor:       1.0	
% Solids:       67.7       Date Received:       10/24/2018         GC Column:       DB-35MS       ID:       0.32       (mm)       Date Extracted:       10/26/2018         GC Column:       DB-XLB       ID:       0.32       (mm)       Date Analyzed:       11/02/2018         GC Column:       DB-XLB       ID:       0.32       (mm)       Date Analyzed:       11/02/2018         Extract Concentrated:       (Y/N)       Y       Extract Volume:       5000       (uL)         Soil Aliquot (VOA):       (uL)       Extraction Type:       SONC       SONC         Heated Purge:       (Y/N)       Injection Volume:       1.0       (uL)         Purge Volume:       (mL)       pH:       Dilution Factor:       1.0	
GC Column: DB-35MS       ID: 0.32 (mm)       Date Extracted: 10/26/2018         GC Column: DB-XLB       ID: 0.32 (mm)       Date Analyzed: 11/02/2018         Extract Concentrated: (Y/N) Y       Extract Volume: 5000 (uL)         Soil Aliquot (VOA):       (uL)         Heated Purge: (Y/N)       Injection Volume: 1.0 (uL)         Purge Volume:       (mL)         pH:       Dilution Factor: 1.0	
GC Column: DB-XLB       ID: 0.32 (mm)       Date Analyzed: 11/02/2018         Extract Concentrated: (Y/N) Y       Extract Volume: 5000 (uL)         Soil Aliquot (VOA): (uL)       Extraction Type: SONC         Heated Purge: (Y/N) Injection Volume: 1.0 (uL)         Purge Volume: (mL)       pH: Dilution Factor: 1.0	
Extract Concentrated: (Y/N) Y       Extract Volume: 5000 (uL)         Soil Aliquot (VOA): (uL)       Extraction Type: SONC         Heated Purge: (Y/N) Injection Volume: 1.0 (uL)         Purge Volume: (mL)       pH: Dilution Factor: 1.0	
Soil Aliquot (VOA):       (uL)       Extraction Type: SONC         Heated Purge: (Y/N)       Injection Volume: 1.0 (uL)         Purge Volume:       (mL)       pH: Dilution Factor: 1.0	
Heated Purge: (Y/N)       Injection Volume: 1.0 (uL)         Purge Volume: (mL)       pH: Dilution Factor: 1.0	
Heated Purge: (Y/N)       Injection Volume: 1.0 (uL)         Purge Volume: (mL)       pH: Dilution Factor: 1.0	-
Purge Volume: (mL) pH: Dilution Factor: 1.0	-
	-
cleanup rypes Cleanup ractor	
Concentration Units (ug/L, mg/L, ug/Kg): ug/kg	
CAS NO. COMPOUND CONCENTRATION Q	
319-84-6 alpha-BHC 2.4 U	
319-85-7 beta-BHC 2.4 U	
319-86-8 delta-BHC 0.74 J	
58-89-9 gamma-BHC (Lindane) 2.4 U	
76-44-8 Heptachlor 2.4 U	
309-00-2 Aldrin 2.4 U	
1024-57-3 Heptachlor epoxide 2.4 U	
959-98-8 Endosulfan I 2.4 U	
60-57-1 Dieldrin 1.3 JP	
72-55-9 4,4'-DDE 0.60 J	
72-20-8 Endrin 4.7 U	
33213-65-9 Endosulfan II 4.7 U	l
72-54-8         4,4'-DDD         4.7         U           1021.07.0         Endegulfere culfete         4.7         U	1
1031-07-8         Endosulfan sulfate         4.7         U           10.00.2         4.44         DDE         4.7         U	
50-29-3         4,4'-DDT         4.7         U           72-43-5         Methoxychlor         3.3         JP	
53494-70-5         Endrin ketone         4.7         U           7421-93-4         Endrin aldehyde         4.7         U	
7421-93-4         Andrin aldenyde         4.7         0           5103-71-9         cis-Chlordane         0.45         JP	
5103-71-9         CIS-Chlordane         0.45         JP           5103-74-2         trans-Chlordane         0.69         JP	
S105 74 2         Clans chiof dane         0.05         01           8001-35-2         Toxaphene         240         U	

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EPA SAMPLE NO.

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ1

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method:	Level:
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.6 (g/mL)	Lab File ID:036F3701
% Solids: 81.1	Date Received: 10/24/2018
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed:10/31/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 5000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: 1.0 (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types: GPC,Florisil	Cleanup Factor: 2,1
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q
319-84-6 alpha-BHC	0.26 JP
319-85-7 beta-BHC	2.1 2.1 JEBU
319-86-8 delta-BHC	1.9 JP
58-89-9 gamma-BHC (Lindane)	2.9 P
76-44-8 Heptachlor	4.4
309-00-2 Aldrin	0.35 JP
1024-57-3 Heptachlor epoxide	2.1 P
959-98-8 Endosulfan I	1.2 JP
60-57-1 Dieldrin	1.1 JP
72-55-9 4,4'-DDE	0.58 JP
72-20-8 Endrin	0.50 JP
33213-65-9 Endosulfan II	4.0 U
72-54-8 4,4'-DDD	0.96 JP
1031-07-8 Endosulfan sulfate	4.9 P
50-29-3 4,4'-DDT	8.3 P
72-43-5 Methoxychlor	130 P
53494-70-5 Endrin ketone	16 P
7421-93-4 Endrin aldehyde	, 1.4 JP
5103-71-9 cis-Chlordane	3.6 P
5103-74-2 trans-Chlordane	16 P

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8001-35-2

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Toxaphene

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Form 1A-OR

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	FORM	1A-OR	EPA SA	MPLE NO.
	ORGANIC ANALYS TARGET ANA		ET ESI	NQ1RE
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Lab Name: She	aly Environmental Services, Inc.	Contract:	EP-W-14035	/ No.
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ES	•
Analytical Me	thod: PEST	Level:		
Matrix: Soil		Lab Sample	e ID: TJ23060-018	
	:30.6(g'/mL)			•••••••••••••••••••••••••••••••••••••••
			ived: 10/24/2018	
	1.1			
GC Column: DE	3-35MS ID: 0.32 (mm)	Date Extra	acted: 10/26/2018	
GC Column: DE	3-XLB ID: 0.32 (mm)	Date Anal	yzed: <u>11/02/2018</u>	
Extract Conce	ntrated: (Y/N) Y	Extract Vo	olume: <u>5000</u>	(uL)
Soil Aliquot	(VOA): (uL)	Extraction	n Type: SONC	
	(Y/N)		Volume: 1.0	(uL)
	(mL)		Dilution Factor: 1.0	
2	: GPC,Florisil			
		-	actor: <u>2,1</u>	······································
Concentration	Units (ug/L, mg/L, ug/Kg):	ug/kg	· · · · · · · · · · · · · · · · · · ·	
CAS NO.	COMPOUND		CONCENTRATION	Q
319-84-6	alpha-BHC		2.1	UU.C
319-85-7	beta-BHC		2.1 2.82	U C ZIPBV 12
319-86-8	delta-BHC		0.36	5 JP
58-89-9	gamma-BHC (Lindane)		7.1	L P
76-44-8	Heptachlor		1.7	JP
309-00-2	Aldrin		0.77	7 J
1024-57-3	Heptachlor epoxide		0.75	5 JP
959-98-8	Endosulfan I		0.57	7 JP
60-57-1	Dieldrin		5.2	2 P
72-55-9	4,4'-DDE		36	5
72-20-8	Endrin		0.54	l J
33213-65-9	Endosulfan II		4.0	U ()
72-54-8	4,4'-DDD		2.9	JP
1031-07-8	Endosulfan sulfate		1.6	5 JP
50-29-3	4,4'-DDT		45	5
72-43-5	Methoxychlor		96	5
53494-70-5	Endrin ketone		22	<u>P</u>
7421-93-4	Endrin aldehyde		0.93	3 JP
5103-71-9	cis-Chlordane		2.1	<u> </u>
5103-74-2	trans-Chlordane		0.45	JP

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8001-35-2

Toxaphene

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2

Lab Name: Sheal	y Environmental Services, Inc.		Contract:_	EP-W-14035	
Lab Code: EQI	Case No.: 47927		MA No.:	SDG No.: ES	NP2
	hod:		Level:		
Matrix: Soil			Lab Sample	ID: TJ23060-019	
Sample wt/vol:			Lab File I	D: 020F2001 ··· ··	
% Solids: 82				ved: 10/24/2018	
	35MS ID: 0.32	(mm)		acted: 10/26/2018	
	XLB ID: 0.32			zed: <u>11/07/2018</u>	
	trated: (Y/N) Y			blume: 5000	(11],)
Extract Concen	trated: (I/N)				(all)
Soil Aliquot (	VOA):	(uL)	Extraction	Type: SONC	
Heated Purge:	(Y/N)		Injection	Volume: 1.0	(uL)
Purge Volume:		(mL)	рН:	Dilution Factor: <u>1.0</u>	
Cleanup Types:	GPC,Florisil		Cleanup Fa	ctor: 2,1	
	Units (ug/L, mg/L, ug/		ug/kg		
CAS NO.	COMPOUND			CONCENTRATION	Q
319-84-6	alpha-BHC			0.48	JP
319-85-7	beta-BHC			2.0 0.80	JPBU
319-86-8	delta-BHC			2.0	U
58-89-9	gamma-BHC (Lindane)			2.0	U
76-44-8	Heptachlor			2.5	P
309-00-2	Aldrin			0.52	JP
1024-57-3	Heptachlor epoxide			0.95	JP
959-98-8	Endosulfan I			1.0	JP
60-57-1	Dieldrin			0.48	JP
72-55-9	4,4'-DDE			3.9	ΰ

72-20-8

72-54-8

50-29-3

72-43-5

1031-07-8

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

33213-65-9

Endrin

4,4'-DDD

4,4'-DDT

Endosulfan II

Methoxychlor

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

Endosulfan sulfate

12-11-

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1.5

12

3.9

0.68

3.9

560

120

1.1

2.8

2.0

200

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ2DL

Lab Name: Shea	ly Environmental Services, Inc.	Contract: <u>EP-W-14035</u>	
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.:_ESN	IP2
Analytical Met	hod: PEST	Level:	
Matrix: Soil		Lab Sample ID: TJ23060-019	
Sample wt/vol:	30.6 (g/mL)	Lab File ID: 020F2001	
% Solids: <u>82</u>	.9	Date Received: 10/24/2018	
GC Column: DB-	35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018	
GC Column: DB-	XLB ID: 0.32 (mm)	Date Analyzed: <u>11/09/2018</u>	
	trated: (Y/N) Y	Extract Volume:5000	(uL)
Soil Aliquot (	VOA):(uL)	Extraction Type: SONC	
	(Y/N)	Injection Volume: <u>1.0</u>	(uL)
	(mL)	pH: Dilution Factor: 10.0	
Cleanup Types:	GPC,Florisil	Cleanup Factor: 2,1	
	Units (ug/L, mg/L, ug/Kg):	ug/kg	
CAS NO.	COMPOUND	CONCENTRATION	Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	υ
58-89-9	gamma-BHC (Lindane)	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	2.8	JD
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	3.9	J DP
72-55-9	4,4'-DDE	39	U
72-20-8	Endrin	. 3.8	J DP '
33213-65-9	Endosulfan II	39	U
72-54-8	4,4'-DDD	39	U
1031-07-8	Endosulfan sulfate	39	υ,
50-29-3	4,4'-DDT	39	U
72-43-5	Methoxychlor	440	D
53494-70-5	Endrin ketone	100	D
7421-93-4	Endrin aldehyde	8.2	JD
5103-71-9	cis-Chlordane	2.8	J DP
5103-74-2	trans-Chlordane	20	U
8001-35-2	Toxaphene	2000	` U

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNQ3

Lab Name: Shealy	Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Meth	nod: PEST	Level:
Matrix: Soil		Lab Sample ID:
	30.5 (g/mL) 9	Lab File ID: 021F2101
% Solids: <u>81.4</u>	4	Date Received: <u>10/24/2018</u>
GC Column: DB-3	5MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: DB-X	LBID: 0.32 (mm)	Date Analyzed:11/09/2018
	trated: (Y/N) Y	Extract Volume: 5000 (uL)
		Extraction Type: SONC
	70A):(uL)	Injection Volume: <u>1.0</u> (uL)
	(Y/N)	
Purge Volume:	(mL)	pH: Dilution Factor: 5.0
Cleanup Types:_	GPC,Florisil	Cleanup Factor: 2,1
	Jnits (ug/L, mg/L, ug/Kg):	ug/kg
	,,,,,,,	
CAS NO.	COMPOUND	CONCENTRATION Q
319-84-6	alpha-BHC	10
319-85-7	beta-BHC	10U
319-86-8	delta-BHC	1.4 J DP
58-89-9	gamma-BHC (Lindane)	10 U
76-44-8	Heptachlor	8.9 J D
309-00-2	Aldrin	1.8 J DP
1024-57-3	Heptachlor epoxide	4.8 J DP
959-98-8	Endosulfan I	8.1 J DP
60-57-1	Dieldrin	1.7 J DP
72-55-9	4,4'-DDE	4.2 J DP
72-20-8	Endrin	8.1 J D
33213-65-9	Endosulfan II	42 DP
72-54-8	4,4'-DDD	2.6 J DP
1031-07-8	Endosulfan sulfate	2.3 J DP
50-29-3	4,4'-DDT	20 U
72-43-5	Methoxychlor	3100 E D
53494-70-5	Endrin ketone	350 E DP
7421-93-4	Endrin aldehyde	4.2 J DP
5103-71-9	cis-Chlordane	1.6 J DP
5103-74-2	trans-Chlordane	1.4 J DP
8001-35-2	Toxaphene	1000 U
0001-00-2	I TORAPHONO	

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EPA SAMPLE NO.

ESNQ3DL

Lab Name: Shea	ly Environmental Services, Inc.	Contract: EP-W-14035	
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.:_E	SNP2
Analytical Met	hod: PEST	Level:	
Matrix: Soil		Lab Sample ID:	
Sample wt/vol:	:30.5 (g/mL)_g		•••
% Solids: 81	1.4	Date Received:	
	-35MS ID: 0.32 (mm)		
	-XLB ID: 0.32 (mm)		
Extract Concer	ntrated: (Y/N) Y	Extract Volume: <u>5000</u>	(uL)
Soil Aliquot (	(VOA): (uL)	Extraction Type: SONC	
Heated Purge:	(Y/N)	Injection Volume: <u>1.0</u>	(uL)
Purge Volume:_	(mL)	pH: Dilution Factor: 50	0.0
Cleanup Types:		Cleanup Factor: 2,1	
Concentration	Units (ug/L, mg/L, ug/Kg):	ug/kg	
CAS NO.	COMPOUND	CONCENTRATION	Q
CAS NO. 319-84-6	COMPOUND alpha-BHC	CONCENTRATION 10	
		·	U 0
319-84-6	alpha-BHC	10	U U U U
319-84-6 319-85-7	alpha-BHC beta-BHC	10 10	0 U 0 U 0 U
319-84-6 319-85-7 319-86-8	alpha-BHC beta-BHC delta-BHC	10 10 10	0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	10 10 10 10 10	U 0 U U 0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor	10 10 10 10 10 10 10	U U 0 U 0 U 0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin	10 10 10 10 10 10 10 10	U 0 U U 0 U 0 U 0 U 0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide	10 10 10 10 10 10 10 10 10	0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I	10 10 10 10 10 10 10 10 10 10	0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U 7 J DP 1 J DP
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin	10 10 10 10 10 10 10 10 10 10 10 10 20	0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE	10 10 10 10 10 10 10 10 10 10 10 10 3	0 U 0 U 0 U 0 U 0 U 0 U 0 U 0 U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       1     J       0     U       0     U       0     U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 33213-65-9	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       1     J       0     U       1     J       0     U       0     U       0     U       0     U       0     U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 33213-65-9 72-54-8	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       1     J       0     U       0     U       0     U       0     U       0     U       0     U
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 33213-65-9 72-54-8 1031-07-8	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       1     J       0     U       0     U       0     U       0     U       0     J       0     J       0     J
319-84-6 319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 33213-65-9 72-54-8 1031-07-8 50-29-3	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       1     J       0     U       0     U       0     U       0     U       0     U       0     J       0     J       0     J       0     J
319-84-6 $319-85-7$ $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$ $72-54-8$ $1031-07-8$ $50-29-3$ $72-43-5$	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor Endrin ketone	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       1     J       0     U       0     U       0     U       0     U       0     U       0     U       0     J       0     J       0     DP       0     D
319-84-6 $319-85-7$ $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$ $72-54-8$ $1031-07-8$ $50-29-3$ $72-43-5$ $53494-70-5$ $7421-93-4$	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor Endrin ketone Endrin aldehyde	10 10 10 10 10 10 10 10 10 10	0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     U       0     J       0     J       0     DP       0     DP       0     U
319-84-6 $319-85-7$ $319-86-8$ $58-89-9$ $76-44-8$ $309-00-2$ $1024-57-3$ $959-98-8$ $60-57-1$ $72-55-9$ $72-20-8$ $33213-65-9$ $72-54-8$ $1031-07-8$ $50-29-3$ $72-43-5$ $53494-70-5$	alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor Endrin ketone	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0     U       0     U

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

PBLK72

Lab Name: Shealy	/ Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI	Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Met		Level:
Matrix: Soil		Lab Sample ID:
	30.0 (g/mL) g	Lab File ID: 016F1701
% Solids: 100		Date Received:
	35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
	(mm)	
	trated: (Y/N) Y	Extract Volume: 5000 (uL)
	VOA):(uL)	Extraction Type: SONC
Heated Purge:	(Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume:	(mL)	pH: Dilution Factor: 1.0
Cleanup Types:	GPC,Florisil	Cleanup Factor: 2,1
Concentration (	Jnits (ug/L, mg/L, ug/Kg):	ug/kg
r		
CAS NO.	COMPOUND	CONCENTRATION Q
319-84-6	alpha-BHC	1.7 U
319-85-7	beta-BHC	0.76 JP
319-86-8	delta-BHC	1.7 U
58-89-9	gamma-BHC (Lindane)	1.7 U
76-44-8	Heptachlor	1.7 U
309-00-2	Aldrin	1.7
1024-57-3	Heptachlor epoxide	1.7 U
959-98-8	Endosulfan I	1.7 U
60-57-1	Dieldrin	3.3 U
72-55-9	4,4'-DDE	3.3 U
72-20-8	Endrin	3.3 U
33213-65-9	Endosulfan II	3.3 U
72-54-8	4,4'-DDD	3.3 U
1031-07-8	Endosulfan sulfate	3.3 U
50-29-3	4,4'-DDT	3.3 U
72-43-5	Methoxychlor	17 U
53494-70-5	Endrin ketone	3.3 U
7421-93-4	Endrin aldehyde	3.3 U
5103-71-9	cis-Chlordane	1.7 U
5103-74-2	trans-Chlordane	1.7 U
8001-35-2	Toxaphene	170 U

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FORM 1A-OR ORGANIC ANALYSIS DATA SHEET

TARGET ANALYTE LIST

EPA SAMPLE NO.

PLCS72(1)

Lab Name: Shea	ly Environmental Services, Inc.		Contract:	EP-W-	14035		
Lab Code: EQI	Case No.: 47927		MA No.:		SDG No.:	ESI	NP2
Analytical Met	hod:		Level:				
Matrix: Soil					TQ87772-002		
Sample wt/vol:	30.0(g/mL)		Lab File ]				
% Solids: 10	0		Date Recei	Lved:			
GC Column: DB-	35MS ID: 0.32	( mm )	Date Extra	acted:	10/26/2018		
GC Column: DB-	XLB ID: 0.32	(mm)	Date Analy	yzed:_	10/31/2018		
Extract Concen	trated: (Y/N) Y		Extract Vo	olume:	5000		(uL)
Soil Aliquot (	VOA):	(uL)	Extraction	і Туре	SONC		
	(Y/N)		Injection	Volume	e:1.0		(uL)
					tion Factor		
	GPC,Florisil		Cleanup Fa	•			
Concentration	Units (ug/L, mg/L, ug/	′Kg):	ug/kg				
CAS NO.	COMPOUND			CON	CENTRATION		, O
319-84-6	alpha-BHC					1.7	Ū
319-85-7	beta-BHC				1.7	1.2	JPBU
319-86-8	delta-BHC					1.7	U
58-89-9	gamma-BHC (Lindane)					1.2	J
76-44-8	Heptachlor					1.7	U
309-00-2	Aldrin					1.7	U
1024-57-3	Heptachlor epoxide					1.3	J
959-98-8	Endosulfan I					1.7	U

60-57-1

72-55-9

72-20-8

72-54-8

50-29-3

72-43-5

1031-07-8

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

33213-65-9

Dieldrin

4,4'-DDE

4,4'-DDD

4,4'-DDT

Methoxychlor

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

Endosulfan II

Endosulfan sulfate

Endrin

act4 12-11-18

Form 1A-OR

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2.6

2.5

2.6

3.3

3.3

2.2

3.3

17

3.3

3.3

1.7

1.2

170

J

J

J

U

U

J

U

U

U

U

U

J

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

PLCS72(2)

Lab Name: Shealy	environmental Services, Inc.	Contract:	EP-W-14035	
Lab Code: EQI	Case No.: 47927	MA No.:	SDG No.: ESN	P2
Analytical Meth	nod: PEST	Level:		
Matrix: Soil		Lab Sample	D: TQ87772-002	
-	30.0 (g/mL) g		D: 017F1801	
* Solids: 100			ved:	
	5MS ID: 0.32 (mm		acted: 10/26/2018	
	(mm		yzed: 10/31/2018	
Extract Concent	crated: (Y/N) Y	Extract Vo	blume: 5000	(uL)
Soil Aliquot (V	/OA): (uL	) Extraction	Type: SONC	
Heated Purge:	(Y/N)	Injection	Volume: <u>1.0</u>	(uL)
Purge Volume:	(mL	) pH:	Dilution Factor: 1.0	
Cleanup Types:	GPC,Florisil	_ Cleanup Fa	actor: 2,1	
	Jnits (ug/L, mg/L, ug/Kg)	ug/kg		
	······································	· · · · · · · · · · · · · · · · · · ·	······································	
CAS NO.	COMPOUND		CONCENTRATION	Q
319-84-6	alpha-BHC		0.17	J
319-85-7	beta-BHC		1.7 0.80	JPBU
319-86-8	delta-BHC		1.7	U
58-89-9	gamma-BHC (Lindane)		1.3	J
76-44-8	Heptachlor		1.7	U
309-00-2	Aldrin		1.7	U
1024-57-3	Heptachlor epoxide		1.6	J
959-98-8	Endosulfan I		1.7	U
60-57-1	Dieldrin		2.7	J
72-55-9	4,4'-DDE		2.7	J
72-20-8	Endrin		2.9	J
33213-65-9	Endosulfan II		3.3	U
72-54-8	4,4'-DDD		3.3	U
1031-07-8	Endosulfan sulfate		1.9	J

act 12-11-18

Form 1A-OR

50-29-3

72-43-5

53494-70-5

7421-93-4

5103-71-9

5103-74-2

8001-35-2

4,4'-DDT

Methoxychlor

Endrin ketone

cis-Chlordane

Toxaphene

Endrin aldehyde

trans-Chlordane

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3.3

17

3.3

3.3

1.7

1.4

170

U

U

U

U

U

J

EPA SAMPLE NO.

ABLK73

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: ARO	Level:
Matrix: Soil	Lab Sample ID:TQ87773-001
Sample wt/vol:30.0(g/mL)9	
% Solids: 100	Date Received:
GC Column: DB-35MS ID: 0.32 (mm	) Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed: 10/30/2018
Extract Concentrated: (Y/N) Y	
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume:(uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types:Sulfuric_Acid,Sulfur	_ Cleanup Factor: <u>1,1</u>
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q
12674-11-2 Aroclor-1016	33 U
11104-28-2 Aroclor-1221	33 U
11141-16-5 Aroclor-1232	33 U

*...* 

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Form 1A-OR

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33

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33

U

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U

U

U

U

EPA SAMPLE NO.

ALCS73(1)

Lab Name: Shea	ly Environmental Services, Inc.		Contract:EP-W-14035
Lab Code: EQI	Case No.: 47927		MA No.: SDG No.: _ ESNP2
Analytical Met	hod: ARO		Level:
Matrix: Soil			Lab Sample ID: TQ87773-002
Sample wt/vol:	30.0 (g/mL)_g		Lab File ID:008F0801
% Solids:10	0		Date Received:
GC Column: DB-	35MS ID: 0.32	(mm)	Date Extracted: 10/26/2018
GC Column: DB-	XLB ID: 0.32	(mm)	Date Analyzed:10/30/2018
Extract Concen	trated: (Y/N) Y		Extract Volume: 10000 (uL)
Soil Aliquot (	VOA):	(uL)	Extraction Type: SONC
	(Y/N)		Injection Volume: 1.0 (uL)
Purge Volume:_		(mL)	
Cleanup Types:	Sulfuric_Acid,Sulfur		Cleanup Factor: 1,1
Concentration	Units (ug/L, mg/L, ug	/Kg):	
CAS NO.	COMPOUND		CONCENTRATION Q
12674-11-2	Aroclor-1016		33
11104-28-2	Aroclor-1221		33 U
11141-16-5	Aroclor-1232		33 U
53469-21-9	Aroclor-1242		33 11

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ALCS73(2)

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:_ ESNP2
Analytical Method: ARO	Level:
Matrix: Soil	Lab Sample ID: TQ87773-002
Sample wt/vol: (g/mL)	
% Solids:100	Date Received:
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed: 10/30/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 10000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types: Sulfuric_Acid,Sulfur	Cleanup Factor: 1,1
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q
12674-11-2 Aroclor-1016	29 J
11104-28-2 Aroclor-1221	33 U
11141-16-5 Aroclor-1232	33 U

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1242

Aroclor-1248

Aroclor-1254

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EPA SAMPLE NO.

ESNP2

Lab Name: Shea	ly Environmental Services, Inc.		Contract: EP-W-14035
Lab Code: EQI	Case No.: 47927		MA No.: SDG No.:_ESNP2
Analytical Met	hod: ARO		Level:
Matrix: Soil			Lab Sample ID:
Sample wt/vol:	30.4 (g/mL) g		Lab File ID: 009F0901
	.4		Date Received:10/24/2018
			Date Extracted: 10/26/2018
GC Column: DB-	XLB ID: 0.32 (I	mm )	Date Analyzed:10/30/2018
Extract Concen	trated: (Y/N) Y		Extract Volume: 10000 (uL)
Soil Aliquot (	VOA):(1	uL)	Extraction Type: SONC
	(Y/N <sup>2</sup> )		Injection Volume: <u>1.0</u> (uL)
Purge Volume:_	(r	mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Sulfuric_Acid,Sulfur	<u> </u>	Cleanup Factor: 1,1
Concentration	Units (ug/L, mg/L, ug/Kg	g):	ug/kg
CAS NO.	COMPOUND		CONCENTRATION Q
12674-11-2	Aroclor-1016		130 U
11104-28-2	Aroclor-1221		130 U
11141-16-5	Aroclor-1232		130 U
53469-21-9	Aroclor-1242		44 J
12672-29-6	Aroclor-1248		130 U

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1254

Aroclor-1260

Aroclor-1262

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#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

ESNP3

Lab Name: Shealy Environmental Services, Inc.	Contract:
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2
Analytical Method: ARO	Level:
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.6 (g/mL)	Lab File ID: 010F1001
% Solids: 38.1	Date Received: 10/24/2018
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed:10/30/2018
Extract Concentrated: (Y/N) Y	40000
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume:(mL)	pH: Dilution Factor: 1.0
Cleanup Types:	Cleanup Factor: 1,1
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q

CAS NO.	COMPOUND	CONCENTRATION	Q
12674-11-2	Aroclor-1016	85	U
11104-28-2	Aroclor-1221	85	U
11141-16-5	Aroclor-1232	85	U
53469-21-9	Aroclor-1242	20	JP
12672-29-6	Aroclor-1248	85	U
11097-69-1	Aroclor-1254	85	U
11096-82-5	Aroclor-1260	85	U
37324-23-5	Aroclor-1262	85	U
11100-14-4	Aroclor-1268	85	U

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EPA SAMPLE NO.

ESNP4

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: ARO	Level:
Matrix: Soil	Lab Sample ID:
Sample wt/vol: 30.1 (g/mL) g	<sup></sup> Lab File ID: <u>011F1101</u>
% Solids: 42.4	Date Received:10/24/2018
GC Column: DB-35MS ID: 0.32 (mm)	
GC Column: DB-XLB . ID: 0.32 (mm)	Date Analyzed:10/30/2018
Extract Concentrated: (Y/N) Y	Extract Volume: 10000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type:SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types: Sulfuric_Acid,Sulfur	Cleanup Factor:
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q
12674-11-2 Aroclor-1016	78 U
11104-28-2 Aroclor-1221	78 U .
11141-16-5 Aroclor-1232	78 U

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

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ESNP5

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2
Analytical Method: ARO	
Matrix: Soil	Lab Sample ID:
Sample wt/völ:30.3(g/mL)9	
% Solids:67.0	Date Received:10/24/2018
GC Column: DB-35MS ID: 0.32 (m	m) Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (mr	10/00/0010
Extract Concentrated: (Y/N) Y	10000
Soil Aliquot (VOA): (u)	<pre>S) Extraction Type: SONC</pre>
Heated Purge: (Y/N)	Injection Volume:(uL)
Purge Volume:(ml	L) pH: Dilution Factor: 1.0
Cleanup Types:Sulfuric_Acid,Sulfur	
Concentration Units (ug/L, mg/L, ug/Kg)	n
CAS NO. COMPOUND	CONCENTRATION Q
12674-11-2 Aroclor-1016	49 U
11104-28-2 Aroclor-1221	49 U

Aroclor-1232

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

11141-16-5

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

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EPA SAMPLE NO.

ESNP6

Lab Name: Shealy Environmental Services, Inc.			Contract: EP-W-14035		
Lab Code: EQI	Case No.: 47927		MA No.: SDG No.: _ESNP2		
Analytical Met	hod: ARO		Level:		
Matrix: Soil			Lab Sample ID:		
Sämple wt/vol:	30.8 (g/mL)_9				
% Solids: 51.	5		Date Received: 10/24/2018		
GC Column: DB-3	35MS ID: 0.32	(mm)	Date Extracted: 10/26/2018		
GC Column: DB->	KLB ID: 0.32	(mm)	Date Analyzed:10/30/2018		
Extract Concen <sup>.</sup>	trated: (Y/N) Y		Extract Volume: 10000 (uL)		
Soil Aliquot (	VOA):	(uL)	Extraction Type: SONC		
Heated Purge: (Y/N)			Injection Volume: <u>1.0</u> (uL)		
Purge Volume:		(mL)	pH: Dilution Factor: 1.0 '		
Cleanup Types:	Sulfuric_Acid,Sulfur		Cleanup Factor:		
Concentration N	Jnits (ug/L, mg/L, ug,	/Kg):	ug/kg		
CAS NO.	COMPOUND		CONCENTRATION Q		
12674-11-2	Aroclor-1016		62 U		
11104-28-2	Aroclor-1221		62 U		
11141-16-5	Aroclor-1232		62 U		
53469-21-9	Aroclor-1242		62 U		
12672-29-6	Aroclor-1248		62 U		
11097-69-1	Aroclor-1254		62 U		
11096-82-5	Aroclor-1260		15 JP		

37324-23-5

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ESNP7

#### FORM 1A-OR ORGANIC ANALYSIS DATA SHEET TARGET ANALYTE LIST

Contract: EP-W-14035 Lab Name: Shealy Environmental Services, Inc. MA No.: \_\_\_\_\_\_ SDG No.: \_ ESNP2 Case No.: 47927 Lab Code: EQI Analytical Method: ARO Level: Lab Sample ID: TJ23060-014 Matrix: Soil Lab File ID: \_\_\_\_ 014F1401 ... ... Sample wt/vol: 30.6 (g/mL) 9 Date Received: \_\_\_10/24/2018 % Solids: 72.6 Date Extracted: 10/26/2018 GC Column: DB-35MS ID: 0.32 (mm) Date Analyzed: 10/30/2018 GC Column: DB-XLB ID: 0.32 (mm) Extract Volume: 10000 . (uL) Extract Concentrated: (Y/N) Y Extraction Type: SONC Soil Aliquot (VOA): \_\_\_\_\_ (uL) Injection Volume: 1.0 \_\_\_\_\_ (uL) Heated Purge: (Y/N)\_\_\_\_\_ pH: \_\_\_\_\_ Dilution Factor: 1.0 (mL) Purge Volume:\_\_\_\_ Cleanup Types: \_\_\_\_\_Sulfuric\_Acid,Sulfur Cleanup Factor: 1,1 ug/kg Concentration Units (ug/L, mg/L, ug/Kg):

CAS NO.	COMPOUND	CONCENTRATION	Q
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	12	JP
12672-29-6	Aroclor-1248	45	Ū ·
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	31	JP
37324-23-5	Aroclor-1262	45	U
11100-14-4	Aroclor-1268	45	U

LPA SAMPLE NO.

ESNP7MS(1)

Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ESNP2		
Analytical Method: ARO	Level:		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:30.5(g/mL)			
% Solids: 72.6	Date Received:10/24/2018		
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018		
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed:10/30/2018		
Extract Concentrated: (Y/N) Y	Extract Volume: (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: SONC		
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)		
Purge Volume: (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:Sulfuric_Acid,Sulfur	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		
CAS NO. COMPOUND	CONCENTRATION Q		
12674-11-2 Aroclor-1016	110 🕓		

12674-11-2	Aroclor-1016	110	× .
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	110	P
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	130	
37324-23-5	Aroclor-1262	45	U
11100-14-4	Aroclor-1268	45	U

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ESNP7MS(2)

Lab Name: Shealy Environmental Services, Inc.	Contract: <u>EP-W-14035</u>
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method:	Level:
Matrix: Soil	Lab Sample ID: <b>TJ23060-014MS</b>
Sample wt/vol: 30.5 (g/mL)	
% Solids: 72.6	10/24/2019
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: ID: ID: (mm)	Date Analyzed: 10/30/2018
Extract Concentrated: (Y/N) Y	10000
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	10
Purge Volume: (mL)	pH: Dilution Factor: 1.0
Cleanup Types:Sulfuric_Acid,Sulfur	Cleanup Factor: 1,1
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg

CAS NO.	COMPOUND	CONCENTRATION	Q
12674-11-2	Aroclor-1016	91	
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	720	P
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	100	
37324-23-5	Aroclor-1262	45	U
11100-14-4	Aroclor-1268	45	U

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EPA SAMPLE NO.

ESNP7MSD(1)

Lab Name: Shea	ly Environmental Services, Inc.	Contract: <u>EP-W-14035</u>		
	Case No.: 47927 hod: ARO		MA No.: SDG No.: <u>ESNP2</u>	
Matrix: Soil			Lab Sample ID: TJ23060-014MD	
Sample wt/vol:	30.0(g/mL)		Lab File ID:016F1601	
% Solids: <u>72</u>	.6		Date Received:	
GC Column: DB-	35MS ID: 0.32	(mm)	Date Extracted: 10/26/2018	
GC Column: DB-	XLB ID: 0.32	(mm)	Date Analyzed: 10/30/2018	
Extract Concen	trated: (Y/N) Y		Extract Volume: 10000 (uL)	
Soil Aliquot (	VOA):	(uL)	Extraction Type:SONC	
	(Y/N)		Injection Volume: 1.0 (uL)	
Purge Volume:		(mL)		
	Sulfuric_Acid,Sulfur		Cleanup Factor: 1,1	
Concentration	Units (ug/L, mg/L, ug	/Kg):	ug/kg	
CAS NO.	COMPOUND		CONCENTRATION O	
12674-11-2	Aroclor-1016		110	
11104-28-2	Aroclor-1221		45 U	
11141-16-5	Aroclor-1232		45 U	
53469-21-9	Aroclor-1242		110 P	
12672-29-6	Aroclor-1248		45 U	
11097-69-1	Aroclor-1254		45 U	

11096-82-5

37324-23-5

11100-14-4

Aroclor-1260

Aroclor-1262

Aroclor-1268

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ESNP7MSD(2)

Lab Name: Shealy Environmental Services, Inc.		Contract:	EP-W-14035		
Lab Code: EQI	Case No.: 47927		MA No.:	SDG No.: _E	SNP2
Analytical Met	hod: ARO		Level:		
Matrix: Soil			Lab Sample	ID:	
Sample wt/vol: 30.0 (g/mL) _g Lab File ID: 016F1601					
% Solids:72.	6		Date Recei	.ved: 10/24/2018	
GC Column: DB-3	35MS ID: 0.32	( mm )	Date Extra	acted: 10/26/2018	
GC Column: DB->	KLBID: 0.32	(mm)	Date Analy	zed: <u>10/30/2018</u>	
	trated: (Y/N) Y			lume: 10000	(uL)
Soil Aliquot (	VOA):	(uL)	Extraction	Type: SONC	
	(Y/N)		Injection	Volume: 1.0	(uL)
Purge Volume:		(mL)	рН:	Dilution Factor: <u>1</u>	0
Cleanup Types:	Sulfuric_Acid,Sulfur		Cleanup Fa		
	Units (ug/L, mg/L, ug/		ug/kg		
CAS NO.	COMPOUND			CONCENTRATION	Q
12674-11-2	Aroclor-1016			8	9
11104-28-2	Aroclor-1221			4	5 U
11141-16-5	Aroclor-1232			4	5 U
53469-21-9	Aroclor-1242			21	0 P
12672-29-6	Aroclor-1248			4	5 U
11097-69-1	Aroclor-1254			4	5 U

11096-82-5

37324-23-5

11100-14-4

Aroclor-1260

Aroclor-1262

Aroclor-1268

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ESNP8

Lab Name: Shea	ly Environmental Services, Inc.		Contract: EP-W-14035		
Lab Code: EQI	Case No.: 47927		MA No.: SDG No.:_ESNP2		
Analytical Met	hod: ARO		Level:		
Matrix: Soil			Lab Sample ID: TJ23060-015		
Sämple wt/vol:	30.4 (g/mL)				
% Solids:70	.2		Date Received:10/24/2018		
GC Column: DB-	35MS ID: 0.32	(mm)			
GC Column: DB-	XLB ID: 0.32	(mm)	Date Analyzed:10/30/2018		
	trated: (Y/N) Y	-	Extract Volume: (uL)		
Soil Aliquot (	VOA):	(uL)	Extraction Type: SONC		
Heated Purge: (Y/N)			Injection Volume: 1.0 (uL)		
Purge Volume:_		(mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Sulfuric_Acid,Sulfur		Cleanup Factor: 1,1		
Concentration	Units (ug/L, mg/L, uy	/Kg):	ug/kg		
CAS NO.	COMPOUND		CONCENTRATION Q		
12674-11-2	Aroclor-1016		46 U		
11104-28-2	Aroclor-1221		46 U		
11141-16-5	Aroclor-1232		46 U		
53469-21-9	Aroclor-1242		9.8 JP		
12672-29-6	Aroclor-1248		46 U		
11097-69-1	Aroclor-1254		46 U		

11096-82-5

37324-23-5

11100-14-4

Aroclor-1260

Aroclor-1262

Aroclor-1268

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Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927			
Analytical Method:	Level:		
Matrix: Soil	Lab Sample ID: TJ23060-016		
Sample wt/vol: 30.7 (g/mL)	a / a TT / a a /		
% Solids: 77.6	Date Received: 10/24/2018		
GC Column: DB-35MS ID: 0.32 (1	mm) Date Extracted: 10/26/2018		
GC Column: DB-XLB ID: 0.32 (n			
Extract Concentrated: (Y/N) Y	10000		
Soil Aliquot (VOA):(u			
Heated Purge: (Y/N)	- I I I I I I I I I I I I I I I I I I I		
Purge Volume:(n	10		
Cleanup Types:Sulfuric_Acid,Sulfur			
Concentration Units (ug/L, mg/L; ug/Kg			
CAS NO. COMPOUND	CONCENTRATION Q		

Aroclor-1016

Aroclor-1221

Aroclor-1232

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

12674-11-2

11104-28-2

11141-16-5

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

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Lab Name: Shealy Environmental Services, Inc.	Contract: EP-W-14035		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: _ ESNP2		
Analytical Method: ARO	Level:		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol: 30.9 (g/mL) 9			
% Solids: 67.7	Date Received:10/24/2018		
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018		
GC Column: DB-XLB ID: 0.32 (mm)			
Extract Concentrated: (Y/N) Y	Extract Volume: 10000 (uL)		
Soil Aliquot (VOA): (uL)	Extraction Type: SONC		
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)		
Purge Volume: (mL)	pH: Dilution Factor: 1.0		
Cleanup Types:Sulfuric_Acid,Sulfur	Cleanup Factor: 1,1		
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg		
CAS NO. COMPOUND	CONCENTRATION Q		
12674-11-2 Aroclor-1016	47 U		
11104-28-2 Aroclor-1221	47 U		

11141-16-5

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1232

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

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ESNQ1

Lab Name: Shealy Environmental Services, Inc.	Contract: <u>EP-W-14035</u>
Lab Code: EQI Case No.: 47927	MA No.: SDG No.: ESNP2
Analytical Method: ARO	Level:
Matrix: Soil	Lab Sample ID: <b>TJ23060-018</b>
Sample wt/vol: 30.6 (g/mL) g	
% Solids: 81.1	Date Received: 10/24/2018
GC Column: DB-35MS ID: 0.32 (mm)	Date Extracted: 10/26/2018
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed: <u>10/30/2018</u>
Extract Concentrated: (Y/N) Y	Extract Volume: 10000 (uL)
Soil Aliquot (VOA): (uL)	Extraction Type: SONC
Heated Purge: (Y/N)	Injection Volume: <u>1.0</u> (uL)
Purge Volume:(mL)	pH: Dilution Factor: 1.0
Cleanup Types:Sulfuric_Acid,Sulfur	Cleanup Factor: 1,1
Concentration Units (ug/L, mg/L, ug/Kg):	ug/kg
CAS NO. COMPOUND	CONCENTRATION Q
12674-11-2 Aroclor-1016	40 U
11104-28-2 Aroclor-1221	40 U

,

11141-16-5

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1232

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

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EPA SAMPLE NO.

ESNQ3

Lab Name: Shealy Environmental Services, Inc.			Contract: EP-W-14035		
Lab Code: EQI	Case No.: 47927		MA No.: SDG No.: _ESNP2		
Analytical Met	hod: ARO		Level:		
Matrix: Soil			Lab Sample ID: TJ23060-020		
Sample wt/vol:					
% Solids: 81	.4		Date Received:10/24/2018		
GC Column: DB-	35MS ID: 0.32	(mm)	Date Extracted: 10/26/2018		
GC Column: DB-	XLB ID: 0.32	(mm)	Date Analyzed: 10/30/2018		
	trated: (Y/N) Y		Extract Volume: 10000 (u	L)	
Soil Aliquot (	VOA):	(uL)	Extraction Type:SONC		
	(Y/N)		Injection Volume: 1.0 (u	ւL)	
Purge Volume:_		(mL)	pH: Dilution Factor: 1.0		
Cleanup Types:	Sulfuric_Acid,Sulfur		Cleanup Factor: _1,1		
Concentration	Units (ug/L, mg/L, ug/	Kg):	ug/kg		
CAS NO.	COMPOUND		CONCENTRATION Q		
12674-11-2	Aroclor-1016		40 U		
11104-28-2	Aroclor-1221		40 U		
11141-16-5	Aroclor-1232		40 U		
53469-21-9	Aroclor-1242		37 JP		
12672-29-6	Aroclor-1248		40 U		

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

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DEA OAREDE NO.

ESNQ2

Lab Name: Shealy Environmental Services, Inc.	Contract: <u>EP-W-14035</u>		
Lab Code: EQI Case No.: 47927	MA No.: SDG No.:ESNP2		
Analytical Method: ARO	Level:		
Matrix: Soil	Lab Sample ID:		
Sample wt/vol:30.6(g/mL)_9	00150101		
% Solids:82.9	Date Received:10/24/2018		
GC Column: ID: (mm	n) Date Extracted: 10/26/2018		
GC Column: DB-XLB ID: 0.32 (mm)	Date Analyzed: <u>10/30/2018</u>		
Extract Concentrated: (Y/N) Y	10000		
Soil Aliquot (VOA): (uL)	.) Extraction Type: SONC		
Heated Purge: (Y/N)			
Purge Volume:(mL)	) pH: Dilution Factor: 1.0		
Cleanup Types: Sulfuric_Acid,Sulfur	Cleanup Factor:		
Concentration Units (ug/L, mg/L, ug/Kg):	: ug/kg		
CAS NO. COMPOUND	CONCENTRATION Q		

CAS NO.	COMPOUND	CONCENTRATION	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	27	J
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	29	JP
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

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### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP2

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: 47927	MA No.:	SDG No.:	MESNP2
Matrix:	Soil	Lab Sample ID: <u>8100326-0</u>	1	
% Solids:	34.6	Date Received: 10/24/201	3	

Analytical method: ICP-AES

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_mg/Kg\_

	• · · · · · · · · · · · · · · · · · · ·				
CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	11500		11/09/2018	1127
7440-36-0	Antimony	1.5	J*	11/09/2018	1127
7440-38-2	Arsenic	12.8		11/09/2018	1127
7440-39-3	Barium	107		11/09/2018	1127
7440-41-7	Beryllium	0.69	J	11/09/2018	1127
7440-43-9	Cadmium	2.3		11/09/2018	1127
7440-70-2	Calcium	65500	*	11/09/2018	1127
7440-47-3	Chromium	28.7		11/09/2018	1127
7440-48-4	Cobalt	9.7	J	11/09/2018	1127
7440-50-8	Copper	39.5		11/09/2018	1127
7439-89-6	Iron	27800		11/09/2018	1127
7439-92-1	Lead	71.8		11/09/2018	. 1127
7439-95-4	Magnesium	16600	*	11/09/2018	1127
7439-96-5	Manganese	677 .	*	11/09/2018	1127 .
7440-02-0	Nickel	27.2		11/09/2018	1127
7440-09-7	Potassium	3710		11/09/2018	1127
7782-49-2	Selenium	0.73	J	11/09/2018	1127
7440-22-4	Silver	0.64	J	11/09/2018	1127
7440-23-5	Sodium	1100		11/09/2018	1127
7440-28-0	Thallium	5.0	U	11/09/2018	1127
7440-62-2	Vanadium	28.5		11/09/2018	1127
7440-66-6	Zinc	294		11/09/2018	1127

NOTE: Hardness (total) is reported in mg/L

Comments:

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP3

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID:8100326-0	)2	
% Solids:	33.6	Date Received: 10/24/201	8	
Analytical	method: <u>ICP-AES</u>			

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mg/Kg\_

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6480		11/09/2018	1132
7440-36-0	Antimony	1.4	J*	11/09/2018	1132
7440-38-2	Arsenic	5.7		11/09/2018	1132
7440-39-3	Barium	71.1		11/09/2018	1132
7440-41-7	Beryllium	0.45	J	11/09/2018	1132
7440-43-9	Cadmium	2.2		11/09/2018	1132
7440-70-2	Calcium	76100	*	11/09/2018	1132
7440-47-3	Chromium	24.3		11/09/2018	1132
7440-48-4	Cobalt	6.9	J	11/09/2018	1132
7440-50-8	Copper	29.2		11/09/2018	1132
7439-89-6	Iron	21200		11/09/2018	1132
7439-92-1	Lead	73.3		11/09/2018	1132
7439-95-4	Magnesium	22000	*	11/09/2018	1132
7439-96-5	Manganese	811	*	11/09/2018	1132
7440-02-0	Nickel	18.0		11/09/2018	1132
7440-09-7	Potassium	1730		11/09/2018	1132
7782-49-2	Selenium	1.6	J	11/09/2018	1132
7440-22-4	Silver	0.33	J	11/09/2018	1132
7440-23-5	Sodium	563	J	11/09/2018	1132
7440-28-0	Thallium	7.2	U	11/09/2018	1132
7440-62-2	Vanadium	20.9		11/09/2018	1132
7440-66-6	Zinc	320		11/09/2018	1132

NOTE: Hardness (total) is reported in mg/L

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Comments:

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### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP4

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:		MA No.:	SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-03		
% Solids:		Date Received: 10/24/2018		

Analytical method: <u>ICP-AES</u>

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mq/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
		8750	¥	11/09/2018	1136
7429-90-5	Aluminum				
7440-36-0	Antimony	2.5	*٦	11/09/2018	1136
7440-38-2	Arsenic	14.5		11/09/2018	1136
7440-39-3	Barium	179		11/09/2018	1136
7440-41-7	Beryllium	1.3		11/09/2018	1136
7440-43-9	Cadmium	4.9		11/09/2018	1136
7440-70-2	Calcium	38500	*	11/09/2018	1136
7440-47-3	Chromium	101		11/09/2018	1136
7440-48-4	Cobalt	. 9.4		11/09/2018	1136
7440-50-8	Copper	52.2	•	11/09/2018	1136
7439-89-6	Iron	66100	D	11/09/2018	. 1239
7439-92-1	Lead	180		11/09/2018	1136
7439-95-4	Magnesium	7780	*	11/09/2018	1136
7439-96-5	Manganese	2980	*	11/09/2018	1136
7440-02-0	Nickel	22.4		11/09/2018	1136
7440-09-7	Potassium	987		11/09/2018	1136
7782-49-2	Selenium	2.4	J	11/09/2018	1136
7440-22-4	Silver	0.90	J	11/09/2018	1136
7440-23-5	Sodium	487	J	11/09/2018	1136
7440-28-0	Thallium	4.5	U	11/09/2018	1136
7440-62-2	Vanadium	57.1		11/09/2018	1136
7440-66-6	Zinc	1010		11/09/2018	1136

NOTE: Hardness (total) is reported in mg/L

Comments:

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### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MESNP5

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.:MESNP2
Matrix: Soil	Lab Sample ID: 8100326-04
% Solids: 65.3	Date Received: 10/24/2018
Analytical method: ICP-AES	
Concentration Units (µg/L, mg/L, mg/kg dry w	eight or µg): mg/Kg

CAS NO.	Analyte	Concentration	Ω	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7030		11/09/2018	1140
7440-36-0	Antimony	1.2	J*_	11/09/2018	1140
7440-38-2	Arsenic	12.7		11/09/2018	1140
7440-39-3	Barium	179		11/09/2018	1140
7440-41-7	Beryllium	1.5		11/09/2018	1140
7440-43-9	Cadmium	2.1		11/09/2018	1140
7440-70-2	Calcium	23200	*	11/09/2018	1140
7440-47-3	Chromium	47.0		11/09/2018	1140
7440-48-4	Cobalt	4.4	J	11/09/2018	1140
7440-50-8	Copper	50.1		11/09/2018	1140
7439-89-6	Iron	22600		11/09/2018	1140
7439-92-1	Lead	126		11/09/2018	1140
7439-95-4	Magnesium	3510	*	11/09/2018	1140
7439-96-5	Manganese	2310	*	11/09/2018	1140
7440-02-0	Nickel	14.2		11/09/2018	1140
7440-09-7	Potassium	589	J	11/09/2018	1140
7782-49-2	Selenium	2.9	J	11/09/2018	1140
7440-22-4	Silver	0.44	J	11/09/2018	1140
7440-23-5	Sodium	271	J	11/09/2018	1140
7440-28-0	Thallium	3.8	U	11/09/2018	1140
7440-62-2	Vanadium	25.1		11/09/2018	1140
7440-66-6	Zinc	524		11/09/2018	1140

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP6

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-05	•	
% Solids:	42.8	Date Received: 10/24/2018		

Analytical method: ICP-AES

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mg/Kg\_

	1			Date Analyzed	Time Analyzed
CAS NO.	Analyte	Concentration	Q		_
7429-90-5	Aluminum	3150		11/09/2018	1157
7440-36-0	Antimony	4.3	J*	11/09/2018	1157
7440-38-2	Arsenic	26.8		11/09/2018	1157
7440-39-3	Barium	115		11/09/2018	. 1157
7440-41-7	Beryllium	0.56	J	11/09/2018	1157
7440-43-9	Cadmium	4.0		11/09/2018	1157
7440-70-2	Calcium	36400	*	11/09/2018	1157
7440-47-3	Chromium	39.7		11/09/2018	1157
7440-48-4	Cobalt	9.6		11/09/2018	1157
7440-50-8	Copper	79.5		11/09/2018	1157
7439-89-6	Iron	57200		11/09/2018	1157
• 7439-92-1	Lead	· 123	······	11/09/2018	1157
7439-95-4	Magnesium	13300	*	11/09/2018	1157
7439-96-5	Manganese	1190	*	11/09/2018	1157
7440-02-0	Nickel	22.8		11/09/2018	1157
7440-09-7	Potassium	754	J	11/09/2018	1157
7782-49-2	Selenium	2.3	J	11/09/2018	1157
7440-22-4	Silver	0.82	J	11/09/2018	1157
7440-23-5	Sodium	242	J	11/09/2018	1157
7440-28-0	Thallium	4.6	U	11/09/2018	1157
7440-62-2	Vanadium	19.9		11/09/2018	1157
7440-66-6	Zinc	462		11/09/2018	1157

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

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### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MESNP7

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-06		
% Solids:	76.1	Date Received: 10/24/2018		

Analytical method: <u>ICP-AES</u>

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): mg/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	2320		11/09/2018	1243
7440-36-0	Antimony	1.7	J*	11/09/2018	1243
7440-38-2	Arsenic	8.7		11/09/2018	1243
7440-39-3	Barium	84.0		11/09/2018	1243
7440-41-7	Beryllium	0.98		11/09/2018	1243
7440-43-9	Cadmium	2.8		11/09/2018	1243
7440-70-2	Calcium	9540	*	11/09/2018	1243
7440-47-3	Chromium	21.9		11/09/2018	1243
7440-48-4	Cobalt	4.7	J	11/09/2018	1243
7440-50-8	Copper	84.0		11/09/2018	1243
7439-89-6	Iron	23100		11/09/2018	1243
7439-92-1	Lead	125		11/09/2018	1243
7439-95-4	Magnesium	3400	*	11/09/2018	1243
7439-96-5	Manganese	581	*	11/09/2018	1243
7440-02-0	Nickel	20.1		11/09/2018	1243
7440-09-7	Potassium	441	J	11/09/2018	1243
7782-49-2	Selenium	1.9	J	11/09/2018	1243
7440-22-4	Silver	0.46	J	11/09/2018	1243
7440-23-5	Sodium	97.3	J	11/09/2018	1243
7440-28-0	Thallium	3.1	Ŭ ·	11/09/2018	1243
7.440-62-2	Vanadium	24.9		11/09/2018	1243
7440-66-6	Zinc	551	dan afar a far a 1924 da far da Anto d'99 1995 and 11 an	11/09/2018	1243

NOTE: Hardness (total) is reported in mg/L

Comments:

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### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP8

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-07		
% Solids:	70.8	Date Received: 10/24/2018		

Analytical method: <u>ICP-AES</u>

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): mg/Kq

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CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4060		11/09/2018	1205
7440-36-0	Antimonÿ	4.1	· J*	11/09/2018	1205
7440-38-2	Arsenic	15.6		11/09/2018	1205
7440-39-3	Barium	106		11/09/2018	· 1205
7440-41-7	Beryllium	1.1		11/09/2018	1205
7440-43-9	Cadmium	5.9		11/09/2018	1205
7440-70-2	Calcium	8190	*	11/09/2018	1205
7440-47-3	Chromium	35.7		11/09/2018	1205
7440-48-4	Cobalt	6.3	· · ·	11/09/2018	1205
7440-50-8	Copper	60.5		11/09/2018	1205
7439-89-6	Iron	71600	D	11/09/2018	1235
7439-92-1	Lead	236	· ·	11/09/2018	1205
7439-95-4	Magnesium	2550	*	11/09/2018	1205
7439-96-5	Manganese	984	*	11/09/2018	1205
7440-02-0	Nickel	22.8		11/09/2018	1205
7440-09-7	Potassium	581	J	11/09/2018	1205
7782-49-2	Selenium	0.48	J	11/09/2018	1205
7440-22-4	Silver	0.98	J	11/09/2018	1205
7440-23-5	Sodium	184	J	11/09/2018	1205
7440-28-0	Thallium	3.1	U	11/09/2018	1205
7440-62-2	Vanadium	22.9		11/09/2018	1205
7440-66-6	Zinc	916		11/09/2018	1205

NOTE: Hardness (total) is reported in mg/L

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Comments:

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FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP9

Lab Name: Bonne	er Analytical Te	esting Co. C	ontract: <u>EP</u>	₹14029	
Lab Code: BON	Case No.:	47927M	IA No.:	SDG	No.: <u>MESNP2</u>
Matrix: Soil		L	ab Sample ID	: 8100326-08	
% Solids: 79.5		D	ate Received	: 10/24/2018	
Analytical meth	od: ICP-AES				
		L, mg/kg dry wei	ght or µg):	mg/Kg	
CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	3980		11/09/2018	1210
7440-36-0	Antimony	2.2	J*	11/09/2018	1210
7440-38-2	Arsenic	8.3		11/09/2018	1210
7440-39-3	Barium	90.4		11/09/2018	1210
7440-41-7	Beryllium	0.59		11/09/2018	1210
7440-43-9	Cadmium	3.2		11/09/2018	1210
7440-70-2	Calcium	12600	*	11/09/2018	1210
7440-47-3	Chromium	15.3		11/09/2018	1210
7440-48-4	Cobalt	4.5	J	11/09/2018	1210
7440-50-8	Copper	94.0		11/09/2018	1210
7439-89-6	Iron	43700	D	11/09/2018	1248
7439-92-1	Lead	102		11/09/2018	1210

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11/09/2018

11/09/2018

11/09/2018

3990

538

15.0

439

0.39

0.53

93.7

2.8

18.6

251

NOTE: Hardness (total) is reported in mg/L

Magnesium

Manganese

Nickel

Potassium

Selenium

Silver

Sodium

Thallium

Vanadium

Zinc

Comments:

7439-95-4

7439-96-5

7440-02-0

7440-09-7

7782-49-2

7440-22-4

7440-23-5

7440-28-0

7440-62-2

7440-66-6

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### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNQO

 Lab Name: Bonner Analytical Testing Co.
 Contract: EPW14029

 Lab Code: BON
 Case No.: 47927
 MA No.: SDG No.: \_

Matrix: <u>Soil</u>

% Solids: 66.9

MA No.:\_\_\_\_\_\_\_SDG No.:\_\_\_MESNP2 Lab Sample ID:\_\_8100326-09 Date Received: 10/24/2018

Analytical method: ICP-AES

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mq/Kq\_\_\_\_

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	· 6470		11/09/2018	1214
7440-36-0	Antimony	1.1	J*	11/09/2018	1214
7440-38-2	Arsenic	6.6		11/09/2018	1214
7440-39-3	Barium	83.1		11/09/2018	1214
7440-41-7	Beryllium	0.76		11/09/2018	1214
7440-43-9	Cadmium	1.3		11/09/2018	1214
7440-70-2	Calcium	8180	*	11/09/2018	1214
7440-47-3	Chromium	20.7		11/09/2018	1214
7440-48-4	Cobalt	3.4	. J .	11/09/2018	1214
7440-50-8	Copper	21.7		11/09/2018	1214
7439-89-6	Iron	15000		11/09/2018	1214
7439-92-1	Lead	52.0		11/09/2018	1214
7439-95-4	Magnesium	1890	*	11/09/2018	1214
7439-96-5	Manganese	575	*	11/09/2018	1214
7440-02-0	Nickel	10.7 .		11/09/2018	1214
7440-09-7	Potassium	634	J	11/09/2018	1214
7782-49-2	Selenium	1.0	J	11/09/2018	1214
7440-22-4	Silver	0.23	J .	11/09/2018	1214
7440-23-5	Sodium	1.54	J	11/09/2018	1214
7440-28-0	Thallium	3.4	U	11/09/2018	1214
7440-62-2	Vanadium	24.3		11/09/2018	1214
7440-66-6	Zinc	209		11/09/2018	1214

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNQ1

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14	4029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:		SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID:	8100326-10	)	
% Solids:_	78.6	Date Received:	10/24/2018		
Analytical	method: ICP-AES				

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_mq/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4220		11/09/2018	1218
7440-36-0	Antimony	2.1	J*	11/09/2018	1218
7440-38-2	Arsenic	9.7		11/09/2018	1218
7440-39-3	Barium	112		11/09/2018	1218
7440-41-7	Beryllium	0.94		11/09/2018	1218
7440-43-9	Cadmium	2.6		11/09/2018	1218
7440-70-2	Calcium	14700	* .	11/09/2018	1218
7440-47-3	Chromium	24.7		11/09/2018	1218
7440-48-4	Cobalt	4.3	J	11/09/2018	1218
7440-50-8	Copper	73.2		11/09/2018	1218
7439-89-6	Iron	33400		11/09/2018	1218
7439-92-1	Lead	111		11/09/2018	1218
7439-95-4	Magnesium	3520	. *	11/09/2018	1218
7439-96-5	Manganese	1070	*	11/09/2018	1218
7440-02-0	Nickel	. 14.4.		11/09/2018	1218
7440-09-7	Potassium	495		11/09/2018	1218
7782-49-2	Selenium	1.3	J	11/09/2018	1218
7440-22-4	Silver	0.49	J	11/09/2018	1218
7440-23-5	Sodium	229	·J	11/09/2018	1218
7440-28-0	Thallium	2.4	U	11/09/2018	1218
7440-62-2	Vanadium	17.5		11/09/2018	1218
7440-66-6	Zinc	373		11/09/2018	1218

NOTE: Hardness (total) is reported in  ${\rm mg/L}$ 

Comments:

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNQ2

Lab Name: Bonner Analytical Testing Co.		Contract: EPW14029				
Lab Code:	BON Case No.: 47927	MA No.: SDG No.:MESNP2				
Matrix:	Soil	Lab Sample ID:8100326-11				
% Solids:	82.5	Date Received: 10/24/2018				

Analytical method: ICP-AES

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_mg/Kg\_

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	3200		11/09/2018	1222
7440-36-0	Antimony	0.78	J*	11/09/2018	1222
7440-38-2	Arsenic	4.1		11/09/2018	1222
7440-39-3	Barium	63.6		11/09/2018	1222
7440-41-7	Beryllium	0.85		11/09/2018	1222
7440-43-9	Cadmium	1.3		11/09/2018	1222
7440-70-2	Calcium	10500	*	11/09/2018	1222
7440-47-3	Chromium	12.0		11/09/2018	1222
7440-48-4	Cobalt	2.7	J	11/09/2018	1222
7440-50-8	Copper	27.2		11/09/2018	1222
7439-89-6	Iron	10900		11/09/2018	1222
7439-92-1	Lead	60.1		11/09/2018	1222
7439-95-4	Magnesium	2350	*	11/09/2018	1222
7439-96-5	Manganese	258	*	11/09/2018	1222
7440-02-0	Nickel	10.5	· ·	11/09/2018	1222
7440-09-7	Potassium	234	J	11/09/2018	1222
7782-49-2	Selenium	1.1	J	11/09/2018	1222
7440-22-4	Silver	0.15	J	11/09/2018	1222
7440-23-5	Sodium	144	J	11/09/2018	1222
7440-28-0	Thallium	2.8	U	11/09/2018	1222
7440-62-2	Vanadium	10.1		11/09/2018	1222
7440-66-6	Zinc	174		11/09/2018	1222

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MESNQ3

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code:	BON Case No.: 47927	MA No.:	SDG No.: MESNP2
Matrix:	Soil	Lab Sample ID: 810032	26-12
% Solids:	83.2	Date Received: 10/24/	2018
Analytical	method: ICP-AES		

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): mg/Kg

		· · · · · · · · · · · · · · · · · · ·			
CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	3660		11/09/2018	1227
7440-36-0	Antimony	1.5	J*	11/09/2018	1227
7440-38-2	Arsenic	7.5		11/09/2018	1227
7440-39-3	Barium	79.9	- <u> </u>	11/09/2018	1227
7440-41-7	Beryllium	0.91		11/09/2018	1227
7440-43-9	Cadmium	3.0		11/09/2018	1227
7440-70-2	Calcium	7650	*	11/09/2018	1227
7440-47-3	Chromium	24.1	*	11/09/2018	1227
7440-48-4	Cobalt	2.7	·J	11/09/2018	1227
7440-50-8	Copper .	21.8		11/09/2018	1227
7439-89-6	Iron	38400	D	11/09/2018	1252
7439-92-1	Lead	246		11/09/2018	1227
7439-95-4	Magnesium	1930	*	11/09/2018	1227
7439-96-5	Manganese	518	*	11/09/2018	1227
7440-02-0	Nickel	9.6		11/09/2018	1227.
7440-09-7	Potassium	215	J	11/09/2018	1227
7782-49-2	Selenium	2.8	J	11/09/2018	1227
7440-22-4	Silver	0.45	J	11/09/2018	1227
7440-23-5	Sodium	149	J	11/09/2018	1227
7440-28-0	Thallium	2.5	U	11/09/2018	1227
7440-62-2	Vanadium	12.8		11/09/2018	1227
7440-66-6	Zinc	306		11/09/2018	1227

NOTE: Hardness (total) is reported in  ${\rm mg/L}$ 

Comments:

Form I-IN

### EPA SAMPLE NO.

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP2

Lab Name: Bonner Analytical Testing Co.	Contract: EPW1	4029		
Lab Code: BON Case No.: 47927	MA No.:		SDG No.:_	MESNP2
Matrix: Soil	Lab Sample ID:	8100326-01	i	
% Solids: 34.6	Date Received:	10/24/2018		
Analytical method: <u>Spectrophotometry</u>		•		
Concentration Units (µg/L, mg/L, mg/kg dry we	eight or µg):	mg/	/Kg	

CAS NO.AnalyteConcentrationQDate AnalyzedTime Analyzed57-12-5Cyanide1.0J11/02/20180958

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP3

160

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:_	BON Case No.: <u>47927</u>	MA No.:	SDG No.:	MESNP2
Matrix:	Soil	Lab Sample ID: <u>8100326-02</u>	2	
% Solids:	33.6	Date Received: 10/24/2018	}	
				•

Analytical method: <u>Spectrophotometry</u>

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g): mg/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.3		11/02/2018	0959

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MESNP4

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14	1029		<u></u>
Lab Code:	BON Case No.: 47927	MA No.:		SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID:	8100326-03	····	
% Solids:	48.5	Date Received:	10/24/2018		
Analytical	method: Spectrophotometry				

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): \_\_\_\_\_\_mq/Kg

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	17.9		11/02/2018	1000

.

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP5

162

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029		
Lab Code:	BON Case No.: <u>47927</u>	MA No.:	SDG No.:	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-04		
% Solids:	65.3	Date Received: 10/24/2018		
Analytical	method: _Spectrophotometry			

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

mg/Kg

CAS NO.	Analyte	Concentration	Ω	Date Analyzed	Time Analyzed
57-12-5	Cyanide	81 F. 3		11/02/2018	1001
NOTE: Hardness	(total) is repo	rted in mg/L	i	· .	

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#### Comments:

ISM02.4 (10/2016)

Form I-IN

### EPA SAMPLE NO.

### FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNP6

\_\_\_\_\_mg/Kg

Lab Name:	Bonner Analytical Testing Co.	Contract: <u>EPW14029</u>		
Lab Code:	BON Case No.: 47927	MA No.:	SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID: 8100326-05	5	
% Solids:	42.8	Date Received: 10/24/2018		
Analytical	method: Spectrophotometry			

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg):

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.5		11/02/2018	1005

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

mg/Kg

MESNP7

Lab Name: Bonner Analytical Testing Co.	Contract: EPW14029
Lab Code: BON Case No.: 47927	MA No.: SDG No.: MESNP2
Matrix: Soil	Lab Sample ID: 8100326-06
% Solids: 76.1	Date Received: 10/24/2018

Analytical method: <u>Spectrophotometry</u>

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.2		11/02/2018	1006

NOTE: Hardness (total) is reported in mg/L

Comments:

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ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET		MESNP8
Lab Name: Bonner Analytical Testing Co.	Contract: <u>EPW14029</u>	
Lab Code: BON Case No.: 47927	MA No.:	SDG No.: MESNP2
Matrix:	Lab Sample ID: 8100326	-07 .
% Solids: 70.8	Date Received: 10/24/20	018
Analytical method: _Spectrophotometry		
Concentration Units (µg/L, mg/L, mg/kg dry w	weight or µg):	mg/Kg

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

CAS NO.	Analyte	Concentration	· Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	3.7		11/02/2018	1007

NOTE: Hardness (total) is reported in mg/L

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Comments:

ISM02.4 (10/2016)

Form I-IN

### EPA SAMPLE NO.

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

MESNQ1

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029			
Lab Code:	BON Case No.: 47927	MA No.:		SDG No.:_	MESNP2
Matrix:	Soil	Lab Sample ID: 810	00326-10		
% Solids:	78.6	Date Received: 10/	/24/2018	-	
Analytical	method: Spectrophotometry				

Concentration Units (µg/L, mg/L, mg/kg dry weight or µg): mg/Kg

					•
CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.53	·	11/02/2018	1011 .

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

		EPA SAMPLE NO.
FORM INORGANIC ANALY	1-IN YSIS DATA SHEET	MESNQ2
Lab Name: Bonner Analytical Testing Co.	Contract: _EPW14029	
Lab Code: BON Case No.: 47927	MA No.:	SDG No.: MESNP2
Matrix: Soil	Lab Sample ID: 8100326-	-11
% Solids: 82.5	Date Received: 10/24/20	018
Analytical method: <u>Spectrophotometry</u>		
Concentration Units (ug/L, mg/L, mg/kg dry	weight or µg):	mq/Kq

ſ	CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
	57-12-5	Cyanide	0.73		11/02/2018	1012

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

FORM 1-IN INORGANIC ANALYSIS DATA SHEET

mq/Kq

MESNQ3

Lab Name:	Bonner Analytical Testing Co.	Contract: EPW14029	
Lab Code:	BON Case No.: 47927	MA No.:	SDG No.: MESNP2
Matrix:	Soil	Lab Sample ID: 810032	6-12
% Solids:	83.2	Date Received: 10/24/2	2018
Analytical	method: <u>Spectrophotometry</u>		

Concentration Units ( $\mu$ g/L, mg/L, mg/kg dry weight or  $\mu$ g):

	and the second				
CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	47.1	D	11/02/2018	1014

NOTE: Hardness (total) is reported in mg/L

Comments:

ISM02.4 (10/2016)

Form I-IN

# Appendix C Illinois EPA Sample Photographs

SITE NAME:	Acme Steel Coke Plant				
CERCLIS ID:	ILN000509241	COUNTY: Cook			

DATE:	10/22/2018
TIME:	1300
PHOTO BY:	J. Willman
DIRECTION:	west
COMMENTS.	

### COMMENTS:

Photo of sediment sample location X221 in Indian Ridge Marsh approximately 1,400 feet south of the culvert draining the southwest corner of the Coke Plant.



DATE:	10/22/2018
TIME:	1300
PHOTO BY:	J. Willman
DIRECTION:	north
COMMENTS:	

Photo of sediment sample location X221 in Indian Ridge Marsh approximately 1,400 feet south of the culvert draining the southwest corner of the Coke Plant.



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/22/2018					
TIME:	1320	1				
PHOTO BY:	J. Willman					
DIRECTION:	east		h t hu			
	in Indian Ridge mately 630 feet Ilvert draining	-			DATE TIME	STEEL COM 10 22 18 132 0 LE X222

DATE:	10/22/2018
TIME:	1320
PHOTO BY:	J. Willman
DIRECTION:	north
COMMENTS:	
	in Indian Ridge mately 630 feet Jlvert draining



SITE NAME: Acme Steel Coke Plant		
CERCLIS ID: ILN000509241		COUNTY: Cook

DATE:	10/22/2018
TIME:	1420
PHOTO BY:	J. Willman
DIRECTION:	north
COMMENTS:	
Photo of sedime	ent sample
location X223.	Sample
collected approx	ximately 8 feet
south of the cul	vert pipe
running southwa	ard from the
site under 116th	n Street.



DATE:	10/22/2018		
TIME:	1420		
PHOTO BY:	J. Willman		
DIRECTION:	south		
COMMENTS:			
Photo of sedim	nent sample		
location X223.	Sample		
collected appro	oximately 8 feet		
south of the culvert pipe			
running southv	vard from the		
site under 116	th Street.		



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/22/2018
TIME:	1500
PHOTO BY:	J. Willman
DIRECTION:	east
COMMENTS:	
Photo of sedim	ent sample
location X224.	Sample
collected collect	ted from the
east side of the	ditch on the
north side of the	e culvert
flowing under 1	16th Street
and into Indian	Ridge Marsh.
Duplicate samp	ole X230
collecte here al	SO.



DATE:	10/22/2018
TIME:	1500
PHOTO BY:	J. Willman
DIRECTION:	south
COMMENTS:	
Photo of sedim	ent sample
location X224.	Sample
collected collected	cted from the
east side of the	e ditch on the
north side of th	e culvert
flowing under 1	16th Street
and into Indian	Ridge Marsh.
Duplicate samp	ole X230
collecte here a	lso.



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/22/2018			
TIME:	1540			
PHOTO BY:	J. Willman			ALL ALL
DIRECTION:	north		SP LIN	
COMMENTS:			<b>学生的</b>	ACME STEEL COKE
Photo of sedim	ent sample		at fill	DATE 10 22 18
location X225.	Sample			TIME 1540
collected collect	ted from the			SAMPLE
eastern openin	g of a culvert		Alexand	SAMPLE X225
running westwa		AN AN AN		
ditch heading b				
railroad tracks.		MELC :	JAAN ST.	
			10- 1/M	

DATE:	10/22/2018
TIME:	1540
PHOTO BY:	J. Willman
DIRECTION:	east
COMMENTS:	
COMMENTS: Photo of sedim	nent sample
	-

collected collected from the eastern opening of a culvert running westward from the ditch heading beneath the railroad tracks.



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MER AND

SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/22/2018	TA
TIME:	1640	
PHOTO BY:	J. Willman	
DIRECTION:	north	
COMMENTS:		
Photo of sedir	nent sample	
location X226	. Sample	
collected from	a low-lying area	
•	e ditch running	
north and sou	•	
western borde		t
Plant property		
		- The second



DATE:	10/22/2018
TIME:	1640
PHOTO BY:	J. Willman
DIRECTION:	east
COMMENTS:	
Photo of sedin	nent sample
location X226.	Sample
collected from	a low-lying area
adjacent to the	e ditch running
north and sout	th along the
western borde	r of the Coke
Plant property	



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/23/2018
TIME:	0900
PHOTO BY:	J. Willman
DIRECTION:	north
COMMENTS:	
Photo of sedir	nent sample
location X227	. Sample
collected colle	cted from low-
lying area nor	thwest of site
that flowed int	o ditch running
north and sou	th along the
western border of the Coke	
Plant property	



DATE:	10/23/2018
TIME:	0900
PHOTO BY:	J. Willman
DIRECTION:	east
COMMENTS:	

Photo of sediment sample location X227. Sample collected collected from lowlying area northwest of site that flowed into ditch running north and south along the western border of the Coke Plant property.



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/23/2018	
TIME:	0930	
PHOTO BY:	J. Willman	
DIRECTION:	east	
COMMENTS:		
Photo of sedir	ment sample	
location X228. Sample		
collected collected from low-		
lying area northwest and north		
of site that flowed into ditch		
running north and south along		
the western border of the		

Coke Plant property.



DATE:	10/23/2018	
TIME:	0930	
PHOTO BY:	J. Willman	
DIRECTION:	south	
COMMENTS:		
Photo of sedir	ment sample	
location X228. Sample		
collected collected from low-		
lying area northwest and north		
of site that flowed into ditch		
running north and south along		
the western border of the		
Coke Plant property.		



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE: TIME:	10/23/2018 1040	ACME STEEL COKE
PHOTO BY: DIRECTION:	J. Willman west	
<b>COMMENTS:</b> Photo of waste location X331. collected in wes	sample Sample st-central at the beginning that once nd then off-site	HIME IOHO SAMPLE X331

DATE:	10/23/2018	
TIME:	1040	
PHOTO BY:	J. Willman	
DIRECTION:	east	
COMMENTS:		
Photo of waste	e sample	
location X331.	Sample	
collected in west-central		
portion of site at the beginning		
of drainageway that once		
flowed south and then off-site		
into Indian Ridge Marsh		



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/23/2018	
TIME:	1120	
PHOTO BY:	J. Willman	
DIRECTION:	north	
COMMENTS:		
Photo of waste		
location X333.	Sample	
collected in eas	st-central	
portion of site r	near foundation	
of historical tank foundation.		
1		



DATE:	10/23/2018	
TIME:	1120	
PHOTO BY:	J. Willman	
DIRECTION:	southeast	
COMMENTS:		
Photo of waste	e sample	
location X333. Sample		
collected in east-central		
portion of site near foundation		
of historical tank foundation.		



SITE NAME:	Acme Steel Coke Plant	
CERCLIS ID:	ILN000509241	COUNTY: Cook

DATE:	10/23/2018	
TIME:	1140	
PHOTO BY:	J. Willman	
DIRECTION:	north	
COMMENTS:		
Photo of wast	e sample	
location X332	. Sample	
collected in south-central		
portion of site where high		
concentrations of SVOCs		
identified in previous sampling		
events		



DATE:	10/23/2018		
TIME:	1140		
PHOTO BY:	J. Willman		
DIRECTION:	south		
COMMENTS:			
Photo of waste	e sample		
location X332.	Sample		
collected in so	uth-central		
portion of site where high			
concentrations of SVOCs			
identified in previous sampling			
events			

