



ecology and environment, inc.

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July 26, 2016

Jeffrey Fowlow, On-Scene Coordinator
United States Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

**Re: Final Trip Report for the May Creek Landfill Site;
Contract Number EP-S7-13-07,
Technical Direction Document Number 16-02-0007**

Dear Mr. Fowlow:

Enclosed please find the Final Trip Report for the May Creek Landfill site, which was located in Renton, Washington. If you have any questions regarding this submittal, please call me at (206) 624-9537.

Sincerely,

ECOLOGY AND ENVIRONMENT, INC.

Brad Martin
START-IV Emergency Response Team Leader

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FINAL TRIP REPORT

**May Creek Landfill
Renton, Washington
TDD: 16-02-0007**



Prepared for

U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue
Seattle, WA 98101

Prepared by

Ecology and Environment, Inc.
720 Third Avenue, Suite 1700
Seattle, WA 98104

July 2016

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1. PLACE VISITED

Site Name:	May Creek Landfill
Responsible Party Name:	Charles Pillon
Location:	15753 Renton Issaquah Road Southeast, Renton, Washington
SSID:	10ZZ
CERCLIS ID:	Not Applicable
Latitude: 7.501782	Longitude: -122.131476
Date(s) of Trip:	February 25, 2016

2. PURPOSE

The United States Environmental Protection Agency (EPA) mobilized Ecology and Environment, Inc. (E & E), under Superfund Technical Assessment and Response Team (START)-IV contract number EP-S7-13-07, Technical Direction Document number 16-02-0007, to provide technical support at the May Creek Landfill site in Renton, Washington. START personnel were tasked with:

- Collecting shallow surface soil samples [0 to 6 inches below ground surface (bgs)],
- Assessing the contents of containers suspected of containing hazardous substances, and
- Recording site conditions and activities through logbook entries and photographic documentation (Attachment A).

3. PERSONS INVOLVED

Agency/Company	Contact Persons/ Position	Phone Number
United States Environmental Protection Agency	Jeffrey Fowlow – Federal On-Scene Coordinator	(206) 553-2751
Washington State Assistant Attorney General	Bill Sherman	(206) 442-4485
Washington State Patrol	Troy Giddings	N/A
Washington State Department of Ecology (Ecology)	Dawn Maurer, Tracie Walters	(425) 649-7000
START– E&E, Inc.	Brad Martin, Project Manager	(206) 624-9537
	Chris Whitehead	
	Eric Lindeman	
	David Burford	
	Eric Nuchims	
	Mike Worden	
START– EHSI, Inc.	Erin Cafferty	(206) 624-9537

4. BACKGROUND & SITE DESCRIPTION

On February 25, 2016 EPA On-Scene Coordinator (OSC) Jeffrey Fowlow and a team of seven START contractors mobilized to the May Creek Landfill site to conduct a one day sampling event in support of the Washington State Attorney General's Office. EPA gained access to the site under a warrant obtained by Washington State Patrol (WSP). The Washington Department of Ecology (Ecology) was also granted access under the warrant. The site consisted of an approximately 10 acre property surrounded by residential and agricultural land use (Figure 1 at the end of Section 4). The site was reportedly operated as an illegal solid waste landfill. The potentially responsible party (PRP) also has claimed to be operating a composting, material recovery, waste reduction and recycling business at the site. Additionally, EPA also received reports that metal scrapping activities were common on the property. The site has been accepting waste since the early 1990s, but has no permit to do so. A King County memorandum dated February 8, 2016 describes wastes collected, stored, and piled at the site as including but not limited to "abandoned vehicles and vehicle parts; appliances and appliance parts; construction and demolition wastes such as wood, drywall, insulation, concrete, metal supports, roofing materials, carpet; discarded plastic, metal, and glass containers that contained food, chemicals, paint, and other liquid materials; bulk paints in containers; numerous discarded hot tubs; household wastes such as mattresses, furniture, CDs and DVDs, toys; yard waste, sod, and soil waste, and various other materials made of wood, plastic, and metals" (King County, 2016).

Some of the vehicles/vessels on the site appeared to have been inhabited recently (though no inhabitants were seen in the dwellings while at the property). The PRP has reportedly moved earth on the property to cover and reposition the waste material to facilitate more material to come onto the site. There is no apparent means of segregating waste, controlling subsurface gasses, or preventing groundwater contamination from leachate. A significant portion of the entire property footprint appears to have been a depositional area for waste. Over the years the waste was consolidated and compacted by the addition of more waste. Little to no native soil was visible throughout the site where waste was present. The depth of the solid waste piles is unknown.

The intent of EPA's investigation was to determine if product/bulk samples collected at the site exhibit Resource Conservation and Recovery Act (RCRA) characteristics according to hazard categorization testing and/or laboratory analysis and to determine if hazardous substances and/or petroleum products are present in the soil at concentrations exceeding the site action levels (see Section 7).



Figure 1
Site Vicinity
May Creek Landfill Site

Renton, King County, Washington

100 50 0 100 200 Feet



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5. ACTIVITIES

5.1 Site Inspection, Features, and Sampling Team Organization

EPA and the sampling teams arrived mid-morning on February 25. Due to the site's large size, the property was divided into four areas (Figure 2 at the end of Section 5) in which sampling would occur (Landfill Area, Residential Area, Workshop Area, Bus/RV Area). Once on site, the OSC and START project manager met with the WSP Incident Commander and discussed the EPA activities, safety concerns, and anticipated timeline for sampling. Following this briefing, the OSC and START project manager initiated a site walk of the Bus/RV, Workshop, and Residential areas. Later in the day, the OSC and START would inspect the Landfill area. Descriptions of each area provided in the sections below.

Each two person sampling teams was instructed to target soil sampling at areas with stained soil, distressed vegetation, and/or evidence of leaks or spills. They were also instructed to look for containers on the site with suspected hazardous contents for potential sampling. At least one sampling team was assigned to each area. In some instances, a second sampling team would support collection efforts in an area.

5.2 Bus/Recreational Vehicle Area Operations

This area was comprised of dozens of motor vehicles (buses, automobiles, boats, and construction equipment) sitting atop flattened piles of solid waste. Some of the vehicles were used as storage for containers, crude workshops, or as dwellings. Debris consistent with the description above from the King County memorandum was interspersed among the vehicles. The site contained hundreds of easily visible containers (most in the Bus/RV area); however, not all containers were safely accessible nor was adequate time onsite available to assess each individual container for hazardous contents. As such, most containers observed at the property were not sampled. Visible containers were visually assessed and screening/sampling priority was given to containers residing in and around a bus containing several hundred chemical containers.

5.3 Workshop Area Operations

This area was comprised of several open buildings that served as storage and workshop areas. Numerous motor vehicles were located in this area. Sheen was present in puddles on the ground in some portions of this area. Relative to the other areas, there was little discarded waste materials in this area. In general, the area appeared to be actively used as a workshop. Several drums with liquid in them were located in this area. The sampling team working in this area was directed to target stained soils, soil near distressed vegetation, and the drums with liquids in them.

5.4 Residential Area Operations

This area was primarily comprised of a residential structure, grassy area, and several motor vehicles. The OSC and START project manager inspected the area. While numerous vehicles were present, there were no areas with stained soil nor did containers suspected of having hazardous contents appear to be present. Following the inspection, the OSC determined that the Residential Area would not be sampled.

5.5 Landfill Area Operations

Debris consistent with the description above from the King County memorandum was widespread in this area. There did not appear to be a system in place for waste segregation. In addition, numerous vehicles were observed in the area. A road system had been cut through the various piles of refuse. The OSC and a START sampling team inspected the area and determined potential sampling locations. Sheen and/or stained soil was observed in two areas of the landfill and was targeted for additional sampling as was a large tank sitting on a trailer.



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6. SAMPLING ACTIVITIES AND ANALYTICAL PROTOCOL

6.1 Sampling Methodology

Samples were collected in a targeted fashion with an emphasis on stained soil, distressed vegetation, containers, and/or evidence of leaks or spills. Grass, leaves, other vegetative material, rocks, and other debris unsuitable for analysis were removed as much as possible from samples prior to placement into sample containers. Samples were stored on ice in coolers and continuously maintained under custody. Chain-of-custody documentation is provided in Attachment B. Sampling methods used for each sample type are described below. The location where each sample was collected is presented in Figure 3 at the end of Section 6.

Shallow Surface Soil Sampling

All surface soil samples were collected with dedicated stainless steel spoons. Collected material was placed into dedicated stainless steel bowls. The material was thoroughly homogenized and placed into pre-cleaned, pre-labeled sample containers. Both volatile organic compound (VOC) and Total Petroleum Hydrocarbon as Gasoline (TPH-Gx) aliquots were placed directly into sample containers prior to collection of other aliquots directly from the sample location. Sample depths ranged from 0 to 6 inches bgs.

Container Sampling

The OSC directed START to determine which, if any, containers discovered at the site may contain hazardous substances. Following exterior examination and photographic documentation of container suspected to contain hazardous substances, a unique ID was assigned to the container. If necessary, containers were moved for safe examination and potential opening/sampling. Samples were collected using a dedicated instrument (e.g., pipette or spoon) to place material in a clean 2 ounce glass jar. Hazard categorization testing was utilized to provide a chemical assessment of the container contents. Testing included one or more of the following tests: visual observation, explosivity, water detection, water solubility and reactivity, corrosivity, oxidization, sulfides, cyanide, flammability, Beilstein, iodine saturation, and/or char test. Based on hazard categorization results (see Section 7), START collected additional aliquots from the containers for submission to an off-site fixed laboratory. Sample material for off-site analysis was collected into a clean 8 ounce glass jar. Samples collected were deemed to be representative of the materials within the container.

6.2 Analytical Methods

Analytical protocols applied (in varying combinations) to the samples included off-site fixed laboratory analysis of Target Analyte List (TAL) metals including mercury, Target Compound List (TCL) chlorinated pesticides/polychlorinated

biphenyls (PCBs), TCL semi-volatile organic compounds (SVOCs), TCL VOCs, pH, water content, metals, anions, TPH-Gx, total petroleum hydrocarbons as diesel (TPH-Dx), total petroleum hydrocarbons, hydrocarbon identification (HCID), toxicity characteristic leaching procedure (TCLP) metals, and flashpoint. Analyses applied to the samples are provided in Table 1.

- **Pesticides/PCBs, SVOCs, and VOCs:** A total of 13 soil samples were submitted for pesticides/PCB, SVOC, and VOC analysis following EPA Contract Laboratory Program (CLP) Statement of Work (SOW) SOM02.3. In addition, one water trip blank sample was submitted for VOC analysis. These samples were submitted to Shealy Environmental Services of West Columbia, South Carolina. Following acceptance of validated data, the samples were transferred to EPA Region 10 Manchester Environmental Laboratory (MEL) of Manchester, Washington for storage in the evidence locker.
- **TAL Metals including mercury:** A total of 13 soil samples were submitted for TAL Metals analysis following EPA CLP SOW ISM02.3. These samples were submitted to Chemtech Consulting Group of Mountainside, New Jersey. Following acceptance of validated data, the samples were transferred to EPA Region 10 MEL of Manchester, Washington for storage in the evidence locker.
- **TPH as gasoline:** A total of 13 soil samples and one water trip blank sample were submitted for TPH as gasoline analysis following NWTPH-Gx. These samples were submitted to MEL of Manchester, Washington.
- **TPH as diesel:** A total of 13 soil samples were submitted for TPH as diesel following NWTPH-Dx. These samples were submitted to MEL of Manchester, Washington.
- **TPH- HCID and flashpoint:** A total of six product and liquid waste samples were submitted for TPH-HCID and seven samples were submitted for flashpoint following NWTPH-HCID and ASTM D3278-78 respectively. These samples were submitted to MEL of Manchester, Washington.
- **Water content, pH, metals, anions:** One sample was submitted for water content, pH, metals, and anions following EPA 9040C, EPA 9000, EPA 6010B, EPA 300.0. This sample was submitted to MEL of Manchester, Washington.
- **TCLP Metals:** One sample was submitted for TCLP metals following EPA SW-846 1311+3050B+6010B. The sample was submitted to MEL of Manchester, Washington.
- **Hold:** A total of three product and liquid waste samples were collected for potential future analysis. These samples were submitted to MEL of Manchester, Washington.

- **Split:** A total of 13 soil samples were collected for split sampling purposes. These samples were submitted to MEL of Manchester, Washington and are being stored in the evidence locker for potential future analysis by the PRP

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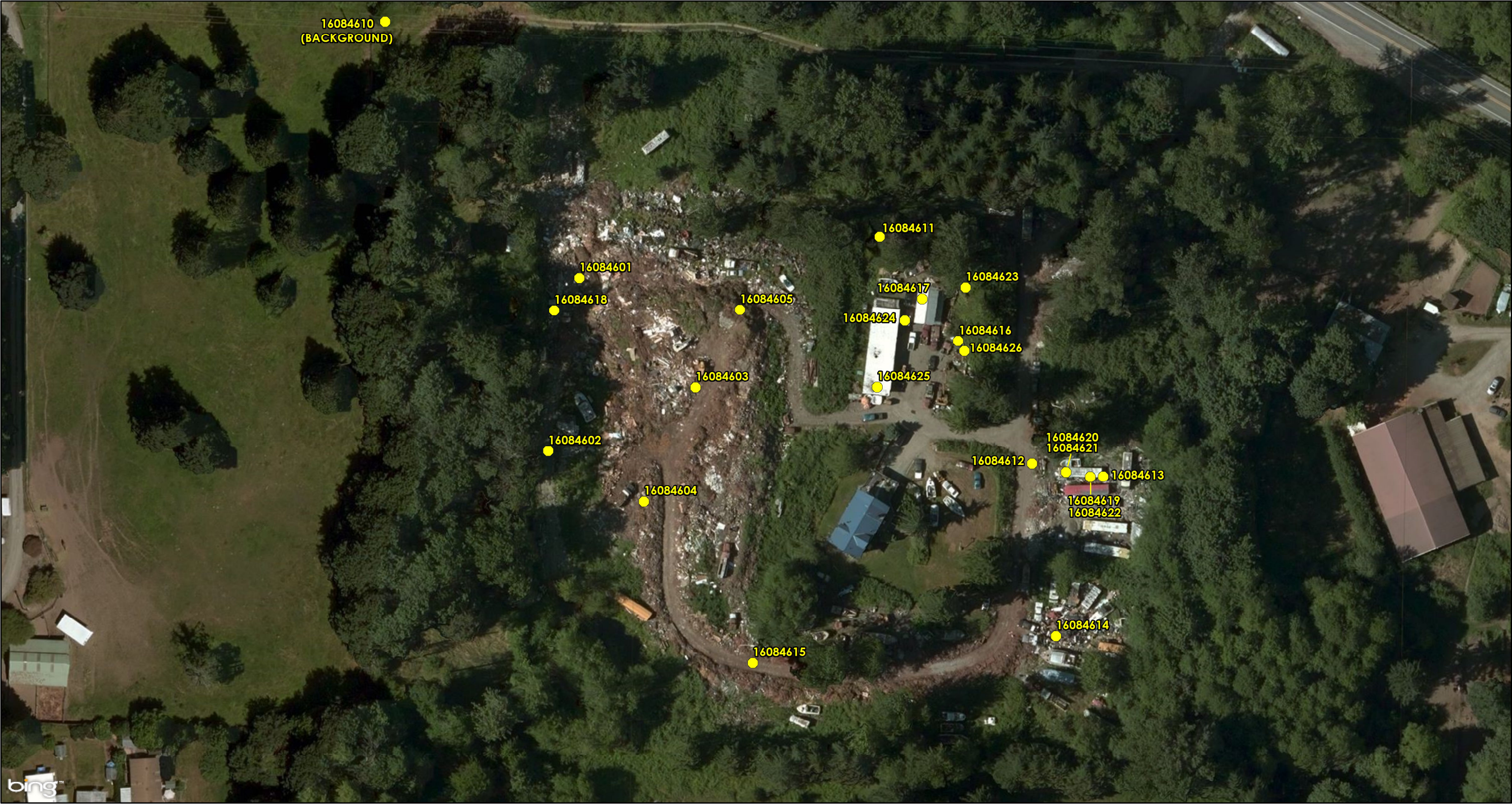
Table 1 Analytical Sample Summary

EPA Sample ID	Station Locations	CLP Organic Sample ID	CLP Inorganic Sample ID	Matrix	Sample Date	Sample Time	Sample Depth	Sampler	CLP TAL Metals ICP-AES (Incl_ Hg)	CLP TCL Pesticides/PCBs	CLP TCL Semivolatiles - SIM	CLP TCL Volatiles	CLP TCLP ICP-AES Metals + Hg	Hold	pH, Water Content, Metals, Anions	SPLIT	TPH-Dx	TPH-Gx	TPH-HCID, Flashpoint
16084601	TA01SS	JHFR0	MJHFR0	SS	2/25/2016	1259	0-6	EMC		X	X	X	X			X	X	X	
16084602	TA02SS	JHFR1	MJHFR1	SS	2/25/2016	1413	0-6	EMC	X	X	X	X	X			X	X	X	
16084603	TA03SS	JHFR2	MJHFR2	SS	2/25/2016	1457	0-6	EMC	X	X	X	X	X			X	X	X	
16084604	TA04SS	JHFR3	MJHFR3	SS	2/25/2016	1534	0-6	EMC	X	X	X	X	X			X	X	X	
16084605	TA05SS	JHFR4	MJHFR4	SS	2/25/2016	1609	0-6	EMC	X	X	X	X	X			X	X	X	
16084606	TR01WT	JHFT8	NA	WT	2/26/2016	1132	-	DB				X						X	
16084610	TD05SS	JHFR9	MJHFR9	SS	2/25/2016	1647	0-6	BHM	X	X	X	X	X			X	X	X	
16084611	TB01SS	JHF10	MJHFR10	SS	2/25/2016	1415	0-6	EOL	X	X	X	X	X			X	X	X	
16084612	TD01SS	JHF11	MJHFR11	SS	2/25/2016	1457	0-6	BHM	X	X	X	X	X			X	X	X	
16084613	TD02SS	JHF12	MJHFR12	SS	2/25/2016	1524	0-6	BHM	X	X	X	X	X			X	X	X	
16084614	TD03SS	JHF13	MJHFR13	SS	2/25/2016	1542	0-6	BHM	X	X	X	X	X			X	X	X	
16084615	TD04SS	JHF14	MJHFR14	SS	2/25/2016	1603	0-6	BHM	X	X	X	X	X			X	X	X	
16084616	TB02SS	JHF15	MJHFR15	SS	2/25/2016	1555	0-6	EOL	X	X	X	X	X			X	X	X	
16084617	TB03SS	JHF16	MJHFR16	SS	2/25/2016	1650	0-6	CRW	X	X	X	X	X			X	X	X	
16084618	TA06PR	NA	NA	LW	2/25/2016	1702	-	EMC						X					
16084619	TC01PR	NA	NA	LW	2/25/2016	1311	-	CRW											X
16084620	TC02PR	NA	NA	PR	2/25/2016	1347	-	CRW						X					
16084621	TC03PR	NA	NA	PR	2/25/2016	1425	-	CRW											X
16084622	TC04PR	NA	NA	PR	2/25/2016	3:13:	-	CRW											X
16084623	TB02DR	NA	NA	LW	2/25/2016	3:43:	-	CRW											X
16084624	TB03DR	NA	NA	LW	2/25/2016	4:12:	-	CRW							X				
16084625	TB04DR	NA	NA	PR	2/25/2016	4:29:	-	CRW											X
16084626	TB01DR	NA	NA	LW	2/25/2016	3:10:	-	EOL											X

Key:

AES = Atomic Emission Spectrometer.
 CLP = Contract Laboratory Program.
 Hg = Mercury.
 ICP = Inductively coupled argon plasma.
 LW = Liquid waste.
 NA = Not applicable.
 PR = Product
 SIM = Selected ion monitoring.
 SS = Surface soil.
 TAL = Target Analyte List.
 TCL = Target Compound List.
 TPH-Dx = Total petroleum hydrocarbons as diesel.
 TPH-Gx = Total petroleum hydrocarbons as gasoline.
 TPH-HCID = Total petroleum hydrocarbons hydrocarbon identification.
 WT = Water.
 X = Indicates the sample was submitted to a fixed laboratory for this parameter.

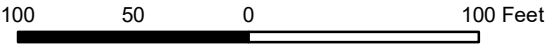
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● Sample Locations*

*Sample locations are approximate

May Creek Landfill Site
Renton, King County, Washington



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7. RESULTS REPORTING

7.1 Results Evaluation

Analytical sampling and hazard categorization screening results are provided in Tables 2 through 5 at the end of Section 7. Hazard Categorization results are provided in Table 2. Hydrocarbon Identification results are provided in Table 3. Product/Waste sample analytical results are provided in Table 4. For soil samples, only those analytes with results above the Contract Required Quantitation Limit (CRQL) in at least one sample are provided in Table 5. A table displaying all soil results (including those below the CRQL) and the data validation memoranda for all sampling matrices are provided in Attachment C.

As part of this assessment, surface soil sample analytical results were compared to EPA Removal Screening Levels (RSLs), EPA Removal Management Levels (RMLs), and Ecology Model Toxics Control Act (MTCA) Method A for unrestricted land use screening criteria.

In addition, Ecology provides guidance for the evaluation of carcinogenic polycyclic aromatic hydrocarbons (c-PAHs) and PCBs. Guidance from Ecology was used to calculate total PCBs and total toxicity equivalent concentration (TTEC) for c-PAHs (Ecology n.d.). These values are provided in the first three columns of the soil samples analytical results summary (Table 5). Criteria are provided for all analytes in milligrams per kilogram (mg/kg); where necessary, these values were converted to micrograms per kilogram (µg/kg) to match reporting units of the analytical data.

The US Code of Federal Regulations (CFR) Title 40 Chapter 1 Part 261 outlines the requirements for the identification and listing of materials as a hazardous waste. Subpart C outlines the characteristics of a hazardous waste including ignitability, corrosivity, and toxicity. Subpart D outlines which substances may be considered a hazardous substance. These subparts were used for comparison of the samples that were collected from containers throughout the site. These values are provided in the first column of the product/waste sample table (Table 4).

7.2 Soil Screening Levels

The following is a brief discussion of the relevancy of each of the soil screening criteria selected.

Federal Screening Levels - Removal Management Levels & Removal Screening Levels

The RMLs are chemical-specific concentrations for individual contaminants in soil and groundwater that may be used to support the decision for EPA to undertake a removal action. They are not necessarily health protective concentrations for chronic exposure,

and exceedance of an RML by itself does not imply that adverse health effects will occur. RMLs help identify areas, contaminants, and conditions where a removal action may be appropriate. RMLs are not de facto cleanup standards and should not be used as such. Sites where contaminant concentrations fall below RMLs are not necessarily “clean” and further action or study may be warranted, and sites with contaminant concentrations above the RMLs may not necessarily warrant a removal action dependent upon such factors as background concentrations, the use of site-specific exposure scenarios, or other program considerations.

The RSLs are used as guidelines at cleanup sites to determine whether levels of contamination found at a site may warrant further investigation or site cleanup. RSLs are more conservative risk-based values for individual analytes than RMLs. The RSLs are considered to be protective for humans (including sensitive populations) over a lifetime; however, RSLs are not always applicable to a particular site and do not address non-human health endpoints, such as ecological impacts. The RSLs are calculated without specific information, but they may be re-calculated using site-specific data. The RSLs are used for site “screening” and can be used as initial cleanup goals, if applicable. RSLs are not de facto cleanup standards and should not be applied as such. Their role in site screening is to help identify areas, contaminants, and conditions that require further federal attention at a particular site. They are useful tools for identifying initial cleanup goals at a site.

State Screening Levels – Model Toxic Control Act Method A

MTCA Method A soil cleanup levels are based upon default criteria that can be applied to sites with a limited number of hazardous substances present to routine cleanups, and where Method A values exist for all contaminants of concern. Method A values are usually the most protective and generally take into account all possible pathways of exposure.

The analytical results discussion for the soil samples will focus on MTCA Method A criteria as these are enforceable cleanup criteria; however, the list of analytes for which there is a MTCA Method A screening level is minimal. Therefore, RSLs and RMLs are provided and have also been evaluated against the sample results and are provided for informational purposes.

7.3 Container Sampling Locations and Analytical Results

A total of 9 container samples were collected at the site. One sample was collected from the landfill area, a total of four samples were collected from the bus/RV area, and three samples were collected from the workshop area. Only seven of the samples were submitted for analysis at an off-site fixed laboratory. As stated above, it is assumed the sampled containers were representative of the numerous other containers that were observed in proximity of sampled containers.

All nine samples were subjected to hazard categorization analyses. Hazard categorization results are provided in Table 2. The information from the hazard categorization process was used to determine which, if any, off-site fixed laboratory analyses would be applied to the samples. Results of hazard categorization screening indicated the presence of flammable and combustible liquids in seven containers, corrosive liquid in one container, and a miscellaneous hazardous substance in one container. Based on these results, EPA determined that seven of these samples would be subjected to additional laboratory testing.

Six samples were submitted for HCID and results are provided in Table 3¹. Four of the samples submitted contained the presence of petroleum products such as motor oil, lube oil, and #2 diesel fuel. Two of the samples indicated no presence of petroleum hydrocarbons.

Seven samples were submitted for fixed laboratory analysis of flashpoint, pH, and/or metals. Product/waste analytical results are provided in Table 4. Two of the samples are considered ignitable based on the required characteristic of ignitability (e.g., a flashpoint less than 65° Celsius). Neither of these samples indicated the presence of petroleum hydrocarbons during the HCID analysis. One sample measured a pH of 12.3; however, it is not considered corrosive as outlined in the characteristics of corrosivity (e.g., pH less than or equal to 2 or greater than or equal to 12.5). Based on the high pH, this sample was also analyzed for TCLP metals. Sample results indicate lead was detected at a concentration that exceeds the TCLP screening criteria which indicates the waste is toxic. This sample was not submitted for HCID analysis.

7.4 Soil Sampling Locations and Analytical Results

A total of 13 soil samples were collected at the site that included one background sample, six from the landfill area, three from the Bus/RV area, and three from the Workshop Area (Figure 3). Soil sample analytical results are presented in Table 5. While exceedances of the EPA RSLs and/or RMLs were detected in most soil samples, the information provided below only provides result comparisons with the MTCA Method A Cleanup levels.

Background Sample

One TAL metal (chromium) was detected at a concentration that exceeds the MTCA Method A cleanup level in the background sample. No other results were detected above the MTCA Method A criteria in the background sample.

¹ Two of these samples were multi-phase liquids (organic phase and aqueous phase), so Table 3 presents the results of eight HCID analyses.

Landfill Area

One TAL metal (chromium) was detected at concentrations that exceed the MTCA Method A criteria in four of the six samples collected ranging from 25.9 milligrams per kilogram (mg/kg) to 34.8 mg/kg.

Two SVOCs (benzo(a)pyrene and TTEC) were detected above the criteria.

Benzo(a)pyrene was detected at concentrations ranging from 130 micrograms per kilogram (µg/kg) to 770 µg/kg in four of the six samples. The TTEC was detected at concentrations above the criteria in four of the six samples ranging from 180.8 µg/kg to 1,102.6 µg/kg.

Motor oil range organics were detected in exceedance of the MTCA Method A criteria in two of the samples at concentrations of 2,200 mg/kg and 3,400 mg/kg.

No pesticides/PCBs or VOCS were detected above the MTCA Method A in any of the six samples collected from the landfill area.

Workshop Area

Two metals (cadmium and chromium) were detected at concentrations that exceed the MTCA Method A criteria. Cadmium was detected at a concentration of 2.8 mg/kg in one of the three samples and chromium was detected in all three of the samples ranging from 23.4 mg/kg to 51.6 mg/kg. Manganese (5,710 mg/kg) was detected in one sample that exceeded the EPA RML.

Two SVOCs (benzo(a)pyrene and TTEC) were detected at concentrations that exceed the site criteria. Benzo(a)pyrene was detected at a concentration of 10 µg/kg in one of the three samples. The TTEC was detected at a concentration that exceeded the criteria in one sample at a concentration of 147.3 µg/kg.

Motor oil range organics were detected above the MTCA Method A in one of the three samples at a concentration of 36,000 mg/kg.

No pesticides/PCBs or VOCs were detected above the MTCA Method A in any of the three samples collected from the workshop area.

Bus/Recreational Vehicle Area

Two metals (cadmium and chromium) were detected at concentrations that exceed the MTCA Method A criteria. Cadmium was detected at a concentration of 2.6 mg/kg in one of the three samples and chromium was detected at 22.6 mg/kg and 26.5 mg/kg in two of the three samples collected.

Two SVOCs, benzo(a)pyrene and TTEC were detected at concentrations above the site criteria. Benzo(a)pyrene was detected at a concentration of 310 µg/kg in one of the

three samples. TTEC was detected above the criteria in one of the three samples at a concentration of 433.2 µg/kg. TTEC was not calculated for sample TD01SS as none of the c-PAHs were detected above the CRQL.

No TPHs, pesticides/PCBs, or VOCs were detected at concentrations that exceeded the MTCA Method A criteria in any of the three samples collected from the Bus/RV area.

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Table 2 Hazard Catergorization Results

Sample ID	ContainerID	State	Color	Viscosity	Turbidity	Water	Solubility	pH	Oxidizer	Sulfide	Cyanide	Flammability	Beilstein	IodineSat	CharTest	Vapor	Other Comments	DOT Hazard Class
16084618	TA06PR	Liquid	Black	Heavy Oil	Opaque	No	Insoluble and floats	7	No	No	N/A	>200°F	Yellow/Orange	Undetermined/ Uninterpretable	Charring residue	Spiderweb Vapors	Some water in sample jar	3 – Flammable and Combustible Liquids
16084619	TC01PR	Liquid	Brown	Medium Oil	Opaque	No	Insoluble and floats	7	No	No	N/A	>200°F	Yellow/Orange	N/A	Tar	Spiderweb Vapors	Fish oil odor, bottom layer water	3 – Flammable and Combustible Liquids
16084620	TC02PR	Liquid	Light Yellow	Less than Water	Translucent	Yes	Miscible	7	No	No	N/A	Nonflammable	Yellow/Orange	N/A	No residue	Vapors that do not ignite		9 – Miscellaneous Hazardous Materials
16084621	TC03PR	Liquid	Brown	Less than Water	Opaque	No	Insoluble and floats	7	No	No	N/A	<100°F	Yellow/Orange	Undetermined/ Uninterpretable	Tar	Vapors that ignite		3 – Flammable and Combustible Liquids
16084622	TC04PR	Liquid	Yellow	Less than Water	Clear	No	Insoluble and floats	7	No	No	N/A	<100°F	Yellow/Orange	Red	Charring residue	Vapors that ignite		3 – Flammable and Combustible Liquids
16084623	TB02DR	Liquid	Black	Medium Oil	Opaque	No	Insoluble and floats	7	No	No	N/A	>200°F	Yellow/Orange	Undetermined/ Uninterpretable	Charring residue	Spiderweb Vapors		3 – Flammable and Combustible Liquids
16084624	TB03DR	Liquid	Red	Waterlike	Translucent	Yes	Miscible	13	No	No	No	Nonflammable	Yellow/Orange	N/A	White residue	Vapors that do not ignite	Slight layer of heavy oil on top of liquid	8B – Basic Corrosive Materials
16084625	TB04DR	Liquid	Red	Medium Oil	Translucent	No	Insoluble and floats	7	No	No	N/A	>200°F	Yellow/Orange	Undetermined/ Uninterpretable	Tar	Spiderweb Vapors	Very light tar after char test	3 – Flammable and Combustible Liquids
16084626	TB01DR	Liquid	Black	Medium Oil	Opaque	No	Insoluble and floats	7	No	No	N/A	>200°F	Yellow/Orange	Undetermined/ Uninterpretable	Charring residue	Spiderweb Vapors		3 – Flammable and Combustible Liquids

Key:
ID = Identification.
N/A = Not applicable.

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Table 3 Hydrocarbon Identification Analytical Results Summary

Sample Number	Station Location	Product/Waste Appearance	Hydrocarbon Identification
16084619 (organic phase)	TC01PR	Viscous caramel colored oil	Motor Oil
16084619 (aqueous phase)		Brownish colored water	Presence of motor oil
16084621	TC03PR	Tan colored organic solvent	Petroleum hydrocarbons not observed
16084622	TC04PR	Yellow colored organic solvent	Petroleum hydrocarbons not observed
16084623 (organic phase)	TB02DR	Blackish colored oil	# 2 diesel and motor oil
16084623 (aqueous phase)		Relatively clear water	Presence of # 2 diesel and motor oil
16084625	TB04DR	Reddish-brown oil	Lube oil
16084626	TB01DR	Black oil	# 2 diesel and motor oil

Table 4 Product/Waste Samples Analytical Results Summary

EPA Sample ID	40 CFR	16084619	16084621	16084622	16084626	16084623	16084624	16084625
Station	Subparts							
Location	C & D	TC01PR	TC03PR	TC04PR	TB01DR	TB02DR	TB03DR	TB04DR
Flashpoint (Degrees Celsius)								
Flashpoint	< 60	>65	<20	<20	>65	>65	NA	>65
pH								
pH	≤2 or ≥12.5	NA	NA	NA	NA	NA	12.3	NA
Metals (mg/L)								
Aluminum		NA	NA	NA	NA	NA	90.3 JL	NA
Antimony		NA	NA	NA	NA	NA	0.42 JL	NA
Arsenic	5	NA	NA	NA	NA	NA	1.1 JL	NA
Barium	100	NA	NA	NA	NA	NA	1.75 JL	NA
Beryllium		NA	NA	NA	NA	NA	0.017 UJL	NA
Cadmium		NA	NA	NA	NA	NA	0.937 JL	NA
Calcium		NA	NA	NA	NA	NA	102 JL	NA
Chromium	5	NA	NA	NA	NA	NA	4.02 JL	NA
Cobalt		NA	NA	NA	NA	NA	0.099 JL	NA
Copper		NA	NA	NA	NA	NA	64 JL	NA
Iron		NA	NA	NA	NA	NA	157 JL	NA
Lead	5	NA	NA	NA	NA	NA	106 JL	NA
Magnesium		NA	NA	NA	NA	NA	20.3 JL	NA
Manganese		NA	NA	NA	NA	NA	3.19 JL	NA
Molybdenum		NA	NA	NA	NA	NA	6.66 JL	NA
Nickel		NA	NA	NA	NA	NA	0.551 JL	NA
Potassium		NA	NA	NA	NA	NA	202 JL	NA
Selenium	1	NA	NA	NA	NA	NA	0.87 UJL	NA

Table 4 Product/Waste Samples Analytical Results Summary

EPA Sample ID	40 CFR	16084619	16084621	16084622	16084626	16084623	16084624	16084625
Station	Subparts							
Location	C & D	TC01PR	TC03PR	TC04PR	TB01DR	TB02DR	TB03DR	TB04DR
Silver	5	NA	NA	NA	NA	NA	0.17 UJL	NA
Sodium		NA	NA	NA	NA	NA	19300 JL	NA
Thallium		NA	NA	NA	NA	NA	0.87 UJL	NA
Vanadium		NA	NA	NA	NA	NA	0.26 JL	NA
Zinc		NA	NA	NA	NA	NA	58.5 JL	NA

Note: Bold type indicates the sample results is above the Contract Required Quantitation Limit.
 Highlighted type indicates the sample results exceeds the established criteria.

Key:
 EPA = United States Environmental Protection Agency.
 ID = Identification.
 J = The identification of the analyte is acceptable; however, the reported value is an estimate.
 mg/L = milligrams per liter.
 NA = the sample was not analyzed for this parameter.
 U = The analyte was not detected at or above the reported value.

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Table 5 Soil Samples Analytical Results Summary

EPA Sample ID	MTCA Method		Removal	16084610	16084601	16084602	16084603	16084604	16084605	16084615	16084611	16084616	16084617	16084612	16084613	16084614
Station Location	A,	Regional	Management	TD05SS	TA01SS	TA02SS	TA03SS	TA04SS	TA05SS	TD04SS	TB01SS	TB02SS	TB03SS	TD01SS	TD02SS	TD03SS
Organic CLP Sample ID				JHFR9	JHFR0	JHFR1	JHFR2	JHFR3	JHFR4	JHF14	JHF10	JHF15	JHF16	JHF11	JHF12	JHF13
Inorganic CLP Sample ID	Unrestricted	Screening Level -	Level -	MJHFR9	MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4	MJHFR14	MJHFR10	MJHFR15	MJHFR16	MJHFR11	MJHFR12	MJHFR13
Description	land use	Residential	Residential	Background	Landfill Area						Workshop Area			Bus/RV Area		
Target Analyte List Metals (mg/kg)																
Aluminum		7700	77000	15500	7200	4300	13300	9980	19100	8520	7340	15000	10300	1020	9520	7210
Arsenic	20	0.68	34	7.6	4.3	2.1	7	8.6	10.6	10.4	18.6	3.4	4.3	0.99 U	5.8	12.4
Barium		1500	15000	123	64.9	39.2	109	72.7	156	113	154	109	80.8	32.8	55.7	98.9
Beryllium		16	160	0.4 JQ	0.22 JQ	0.13 JQ	0.46 JQ	0.31 JQ	0.54	0.26 JQ	0.056 JQ	0.32 JQ	0.29 JQ	0.065 JQ	0.33 JQ	0.21 JQ
Cadmium	2	7.1	70	0.6	0.87	0.76	0.82	0.67	0.94	0.81 JQ	2.8	1.3	12	0.12 JQ	2.6	0.69
Calcium				3220	5820	4070	10000	5970	5760	22500	21200	8840	5270	21300	5800	16400
Chromium	19	12000	120000	19.5	18.8	16.8	25.9	26.4	31.6	34.8	23.4	32.4	51.6	1.6	22.6	26.5
Cobalt		2.3	23	5.6	4.5 JQ	2.8 JQ	7.7	6.5	11.4	5.5 JQ	7.7	11	9.7	0.68 JQ	7	4.2 JQ
Copper		310	3100	15.5 JH	30.4 JH	49.8 JH	36.9 JH	30.1 JH	57.4 JH	50 JH	120 JH	61 JH	80.3 JH	15.5 JH	55.5 JH	42.1 JH
Iron				15100	11200	8810	18900	15600	25100	12600	13500	21200	22400	1770	27100	10400
Lead	250	400	400	17	32.5	29.7	31.4	23.2	15.7	52.9	143	68.5	155	0.9 JQ	60	42.2
Magnesium				2380	3000	1680	3630	4760	6960	3660	3340	8220	6410	7910	3330	3000
Manganese		180	1800	883 JH	212 JH	154 JH	420 JH	338 JH	491 JH	318 JH	5710 JH	336 JH	315 JH	124 JH	333 JH	245 JH
Mercury	2	1.1	9.4	0.081 JQ	0.061 JQ	0.08 JQ	0.19	0.13 JQ	0.094 JQ	0.22 JQ	0.1 JQ	0.042 JQ	0.05 JQ	0.02 JQ	0.057 JQ	0.12 JQ
Nickel		150	1500	18.1	22.3	12.1	21.2	24.3	28.5	23.1	28	27.9	25.4	1.7 JQ	23.6	19.1
Potassium				604	502 JQ	420	1160	796	3000	918	829	1210	637	2190	551	754
Sodium				70.6 JQ	198 JQ	238 JQ	160 JQ	147 JQ	211 JQ	237 JQ	286 JQ	438	415	660	276 JQ	205 JQ
Vanadium		39	390	34.9	28.5	15.9	47.3	35.1	54.7	30.3	28.4	39.9	38.8	2.3 JQ	29.9	24.3
Zinc		1200	23000	47	106	98.5	123	103	83.3	193	531	118	163	28.1	238	153
Semivolatile Organic Compounds (µg/kg)																
2-Methylnaphthalene		24000	230000	4.7 U	27 U	20 U	3.1 JQ	4.9	5.1 U	140	27 U	3.7 U	220 JH	13 U	19 U	35 U
Acenaphthene		360000	3500000	4.7 U	4.4 JQ	3.8 JQ	33	67	5.1 U	160	6.1 JQ	0.97 JQ	140 U	13 U	1.9 JQ	39
Acenaphthylene				4.7 U	6.9 JQ	4.7 JQ	23	32	0.98 JQ	81	15 JQ	4.3	140 U	13 U	4.1 JQ	14 JQ
Anthracene		1800000	17000000	1.3 JQ	20 JQ	14 JQ	330	330	2 JQ	310	31	8.4	80 JQ	13 U	13 JQ	130
Benzo(a)anthracene		160	15000	1.4 JQ	150 JK	56 JK	370	710	1.7 JQ	310 JK	95 JK	18 JK	140 UJK	13 U	19 JK	290 JK
Benzo(a)pyrene	100	16	1500	1.2 JQ	130	62	380 JK	770 JK	2.4 JQ	270	110	24	86 JQ	13 U	23	310
Benzo(b)fluoranthene		160	15000	4.2 JQ	330	92	780 JK	1500 JK	6.8	500	170	31	480	1.9 JQ	42	600
Benzo(g,h,i)perylene				2.5 JK	51 JK	35 JK	320	480	5 JK	84 JK	54 JK	12 JK	120 JK	13 JQ	29 JK	110 JK
Benzo(k)fluoranthene		1600	150000	0.97 JQ	27 U	28	350 JK	480	2 JQ	190	53	14	140 U	13 U	16 JQ	200
Bis(2-ethylhexyl)phthalate		38000	1200000	240 U	1000 JQ	200 JQ	270 JQ	490	260 U	1500 JQ	560 JQ	160 JQ	17000	690 U	350 JQ	1000 JQ
Butylbenzylphthalate		290000	12000000	240 U	1400 JK	190 JQ	350 U	250 U	260 U	2000 UJK	1400 U	120 JQ	7400 U	690 U	190 JQ	1800 U
Chrysene		16000	1500000	3.3 JQ		53 JK	430	860	3.3 JQ	510 JK	150 JK	25 JK	240 JK	13 U	19 JK	420 JK
Fluoranthene		240000	2300000	3.4 JQ	120	100	1100	2300	2.8 JQ	1100	110	30	200	10 JQ	50	850
Fluorene		240000	2300000	4.7 U	27 U	20 U	48	100	5.1 U	120	27 U	3.7 U	140 U	13 U	19 U	57
Indeno(1,2,3-cd)pyrene		160	15000	1.3 JK	28 JK	27 JK	350	550	2.9 JK	54 JK	40 JK	11 JK	55 JK	4.3 JQ	13 JK	100 JK
Naphthalene	5000	3800	130000	4.7 U	27 U	20 U	6.8 U	12	5.1 U	39 U	27 U	3.7 U	73 JQ	13 U	19 U	35 U
Pentachlorophenol		1000	99000	5 JQ	56 U	40 U	41	29	10 U	310	55 U	24	290 U	27 U	39 U	75
Phenanthrene				2.9 JQ	74	50	600	1400	1.6 JQ	490	67	16	560 JH	6.2 JQ	27	310
Pyrene		180000	1700000	2.6 JQ	190 JK	85 JK	940	2200	3.2 JQ	910 JK	140 JK	29 JK	540 JK	5.4 JQ	36 JK	740 JK
TTEC	100			0.13	180.8	82.83	569.3	1102.6	0.97	380.5	147.3	31.65	55.9		30.59	433.2
Total Petroleum Hydrocarbons (mg/kg)																
TPH-GC/Motor Oil Range Organics	2000			25	2200 JK	350	1700	250	130	3400	480	280	36000	120	760	640
TPH-Gx Gasoline Range Organics	100			8.5 U	26 JH	15	48 UJH	5.6 U	7.6 U	72 UJH	6.3 U	4.3 U	5.2 U	52 U	6.3 U	20 UJH
Polychlorinated Biphenyls (µg/g)																
Aroclor-1242		230	24000	47 U	17 JQ	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	17 JK
Aroclor-1254		120	1100	47 U	55 U	39 U	68 U	48 U	52 U	39 JK	28 JQ	7.4 JQ	60	140 U	21 JQ	69 U
Aroclor-1260		240	24000	1.8 JK	9.6 JK	6.9 JK	68 U	48 U	2.6 JQ	77 U	54 U	37 U	100	140 U	19 JK	9.3 JK

EPA Sample ID	MTCA Method	Regional	Removal	16084610	16084601	16084602	16084603	16084604	16084605	16084615	16084611	16084616	16084617	16084612	16084613	16084614
Station Location	A,		Management	TD05SS	TA01SS	TA02SS	TA03SS	TA04SS	TA05SS	TD04SS	TB01SS	TB02SS	TB03SS	TD01SS	TD02SS	TD03SS
Organic CLP Sample ID				JHFR9	JHFR0	JHFR1	JHFR2	JHFR3	JHFR4	JHF14	JHF10	JHF15	JHF16	JHF11	JHF12	JHF13
Inorganic CLP Sample ID	Unrestricted	Screening Level -	Level -	MJHFR9	MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4	MJHFR14	MJHFR10	MJHFR15	MJHFR16	MJHFR11	MJHFR12	MJHFR13
Description	land use	Residential	Residential	Background	Landfill Area				Workshop Area				Bus/RV Area			
Total PCBs	1000			1.8	9.6	6.9				39			160		19	26.3
Chlorinated Pesticides (µg/kg)																
4,4'-DDD		2300	220000	4.7 U	4 JK	3.9 U	1 JK	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	12 JK	13 U	3.9 U	6.8 U
4,4'-DDE		2000	160000	4.7 U	6.2 JK	3.9 U	4.3 JQ	0.77 JK	2.9 JQ	8.9 JK	2.5 JK	3.8 U	1.8 JQ	13 U	3.9 U	14 JK
4,4'-DDT	3000	1900	36000	4.7 U	7.6 JK	0.93 JQ	5.4 JQ	5.7	2.2 JK	14 JL	7.6 JK	0.95 JQ	6.1 JL	13 U	3.1 JK	17 JK
beta-BHC		300	30000	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	9.5 JK	6.9 U	2 U	3.5 U
cis-Chlordane		1700	35000	2.4 U	2.3 JK	1.1 JQ	1.2 JQ	1.7 JK	2 JQ	4.4 JL	2.1 JQ	0.71 JQ	1.8 U	6.9 U	2 U	7.3 JK
Dieldrin		34	3100	4.7 U	6.5 JK	1.8 JQ	5 JQ	7.8 U	1.9 JQ	16 JK	7.6 JK	3.8 U	3.6 U	13 U	3.9 U	11 U
Endosulfan II		47000	370000	4.7 U	5.4 U	3.9 U	6.8 U	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	11 JK	13 U	3.9 U	6.8 U
Endosulfan sulfate				4.7 U	5.4 U	0.33 JK	6.8 U	0.47 JQ	5.3 U	7.8 U	5.5 U	3.8 U	6.4 JL	13 U	3.9 U	6.8 U
Endrin aldehyde				4.7 U	5.4 U	3.9 U	6.8 U	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	4.3 JK	13 U	3.9 U	2.5 JQ
Heptachlor		130	12000	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	2.3 JK	6.9 U	2 U	3.5 U
Heptachlor epoxide		70	800	2.4 U	0.6 JQ	2 U	1.5 JQ	0.73 JQ	0.78 JQ	4.1 U	2.8 U	1.9 U	6.3 JK	6.9 U	2 U	3.5 U
trans-Chlordane				2.4 U	2.8 U	0.99 JK	3.5 U	2.4 U	1.8 JK	4.6 U	2.8 U	1.9 U	1.8 U	6.9 U	2 U	18 U
Volatile Organic Compounds (µg/kg)																
2-Butanone				17 U	100	R	78	20 U	20 U	49	23 U	8.7 U	11	100 U	11 U	68
2-Hexanone		20000	200000	17 UJK	20 U	10 U	23 U	20 U	20 U	20 U	23 U	8.7 U	11 U	100 U	11 U	28 U
4-Methyl-2-pentanone		3300000	5300000	17 UJK	20 U	200	23 U	20 U	20 U	20 U	23 U	8.7 U	11 U	100 U	11 U	28 U
Acetone		6100000	61000000	92	230	R	250	70	34	170	18 JQ	9.1	32	57 JQ	8.5 JQ	250
Carbon disulfide		77000	770000	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	25	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Ethylbenzene	6000	5800	580000	8.6 U	19	58	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Isopropylbenzene				8.6 U	6.1 JQ	5.9	11 U	10 U	9.8 U	84	12 U	4.3 U	5.3 U	51 U	5.4 U	5.3 JQ
m, p-Xylene	9000	55000	550000	8.6 U	150	190	11 U	10 U	9.8 U	7.3 JQ	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
o-Xylene	9000	65000	650000	8.6 U	45	61	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Tetrachloroethene	50	8100	81000	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	26	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Toluene	7000	490000	4900000	3.4 JQ	R	R	5.2 JQ	10 U	2.9 JQ	8 JQ	2.1 JQ	4.3 U	2.1 JQ	8.9 JQ	2.1 JQ	4.9 JQ
Trichlorofluoromethane		2300000	730000	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	64	12 U	4.3 U		51 U	5.4 U	14 U

Note:

- Bold type indicates the sample result is above the Contract Required Quantitation Limit.
- Yellow highlighted type indicates the sample result exceeds the MTCA Method A, unrestricted land use criteria.
- Green highlight indicates the sample result exceeds the Regional Screening Level for residential land use.
- Orange highlight indicates the sample results exceeds the Removal Management Level for residential land use.
- Blank cells in the screening criteria columns indicates there is no value for this analyte.

- Key:
- µg/kg = microgram per kilogram.
 - CLP = Contract Laboratory Program.
 - EPA = United States Environmental Protection Agency.
 - H = High bias.
 - ID = Identification.
 - J = The associated value is an estimated quantity.
 - K = Unknown bias.
 - L = Low bias.
 - mg/kg = milligram per kilogram.
 - MTCA = Model Toxics Control Act.
 - Q = The detected concentration is below the method reporting limit/contract required quantitation limit but is above the method detection level.
 - R = The data are unusable. The analyte may or may not be present in the sample.
 - U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
 - UJ = The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

8. SUMMARY AND CONCLUSIONS

The May Creek Landfill site consists of an approximately 10 acre property which is surrounded by agricultural and residential land use. The site has been used for unpermitted dumping since the early 1990s. Landfill debris, containers, and vehicles in varying stages of disrepair were noted throughout the property. EPA and START staff mobilized to the site on February 25, 2016 and collected a total of nine product/waste samples and 13 surface soil samples.

Product/waste samples were subjected to hazard categorization testing and select samples were subject to additional off-site fixed laboratory analysis. A total of six samples were submitted for HCID analysis, of which four contained petroleum product(s). Laboratory analytical results indicate two of the seven samples were ignitable based on flashpoint analysis. These samples did not contain petroleum hydrocarbons based on the HCID analysis. One sample exhibited a high pH but is not characteristic of corrosivity; however, TCLP metals results indicated concentrations of lead that indicates the product is toxic. These results indicate RCRA characteristic waste is present on the site.

EPA/START observed hundreds of containers on site. The containers were mostly unlabeled, unsecured, haphazardly placed, exposed to the elements, and in many cases, evidence of leaking was observed.

Based on visual assessment, field analysis, and laboratory analysis of samples from the visible containers, it is reasonable to conclude that dozens, perhaps hundreds, of these vessels contain hazardous substances and waste that include ignitable, corrosive, and/or toxic materials. The lack of control and management of these containers and their contents may present a substantial threat to human health and the environment. EPA/START did not excavate or move debris at the site to assess if chemical containers were present within the piled waste material. Given the haphazard waste management practices that have been utilized over the years, it is likely that many hundreds of chemical containers are present under the top layers of debris. These inaccessible containers may be subjected to many thousands of pounds of weight, pressure, and decaying environments that may facilitate a more rapid release of potentially hazardous contents. The known containerized hazardous substances present a threat of release to the environment. These hazardous substances, and any others discovered, should be properly removed and disposed of at an appropriate and licensed facility.

The soil samples were submitted for off-site fixed laboratory analysis and compared to MTCA Method A unrestricted land use criteria. Sample results indicated two TAL metals (cadmium and chromium), two SVOCs (benzo(a)pyrene and TTEC) and motor oil range organics were detected at concentrations above the site criteria. Chromium was also

detected above the MTCA Method A cleanup level in the background sample and therefore may not be directly attributable to site activities. However, the presence of cadmium, benzo(a)pyrene, TTEC, and motor oil range organics in soil samples at concentrations exceeding MTCA Method A criteria indicates that site activities have resulted in the release of these hazardous substances to the environment. Based on the volume and type of waste on the property and the wide distribution of soil contamination (discovered through a very limited sampling regime), it is reasonable to conclude that much of the original surface soil, currently inaccessible because it is buried to an unknown depth with waste, is similarly contaminated at concentrations in excess of MTCA Method A standards. Additional assessment of the soil conditions at the site that would include subsurface investigation would provide additional data regarding the lateral and vertical extent of soil contamination. However, a thorough soil assessment may not be practical or possible given the volume of waste material currently overlying the soil.

9. References

Ecology and Environment, Inc. (E & E), May, 2016, *Site-Specific Sampling Plan: May Creek Landfill*, prepared for United States Environmental Protection Agency, Contract Number EP-S7-13-07, Technical Direction Document Number 16-02-0007.

Seattle and King County, Washington Public Health, Solid Waste, Rodents, and Zoonotic Disease Program, February 8, 2016. Memorandum: *Inspection Summary and Regulatory Issues at 15753 SE Renton Issaquah Rd, Renton, WA 98506; Parcel # 0638100031; (aka: Chuck Pilon Property)*.

Washington State Department of Ecology (Ecology), n.d. *Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures Using Toxicity Equivalency Factors*.

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ATTACHMENT A – Photograph Log

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MAY CREEK LANDFILL
Renton, Washington



Photo 1 Site debris pile consisting of heterogeneous waste including building materials and vehicle parts.

Direction: West Date: 2/25/16 Time: 13:37



Photo 3 One of several pathways throughout the site debris piles. A mobile home is positioned at the end of this pathway.

Direction: East Date: 2/25/16 Time: 13:38

TDD Number: 16-02-0007
Photographed by: Brad Martin



Photo 2 Large household appliances are grouped among other unsorted debris including tires and plastic.

Direction: Northeast Date: 2/25/16 Time: 13:37



Photo 4 Several boats are positioned on top of a pile of varying debris beyond the crude roadway.

Direction: South Date: 2/25/16 Time: 13:45

MAY CREEK LANDFILL
Renton, Washington

TDD Number: 16-02-0007
Photographed by: Brad Martin



Photo 5 A pond is on site with debris around the perimeter.

Direction: West Date: 2/25/16 Time: 13:45



Photo 6 Product spilled and mixed in with debris.

Direction: Down Date: 2/25/16 Time: 13:49



Photo 7 Large oil tanker on trailer containing minimal amounts of oil sludge on the base.

Direction: West Date: 2/25/16 Time: 13:50



Photo 8 Vacated transportation vehicles scrapped on site used as a storage depot for chemical storage.

Direction: East Date: 2/25/16 Time: 15:29

MAY CREEK LANDFILL
Renton, Washington

TDD Number: 16-02-0007
Photographed by: Brad Martin



Photo 9 Excess chemical containers sitting stacked and exposed outside next to a transportation vehicle used as chemical storage.

Direction: East Date: 2/25/16 Time: 15:29



Photo 10 Transportation vehicles and drums grouped together on the South Eastern quadrant of the landfill.

Direction: Southeast Date: 2/25/16 Time: 15:48



Photo 11 Several individuals living on site in mobile homes on top of debris piles.

Direction: Southeast Date: 2/25/16 Time: 15:48



Photo 12 A fire truck, tow truck, and RV are among several other vehicles placed near a structure on the property.

Direction: Southeast Date: 2/25/16 Time: 16:00

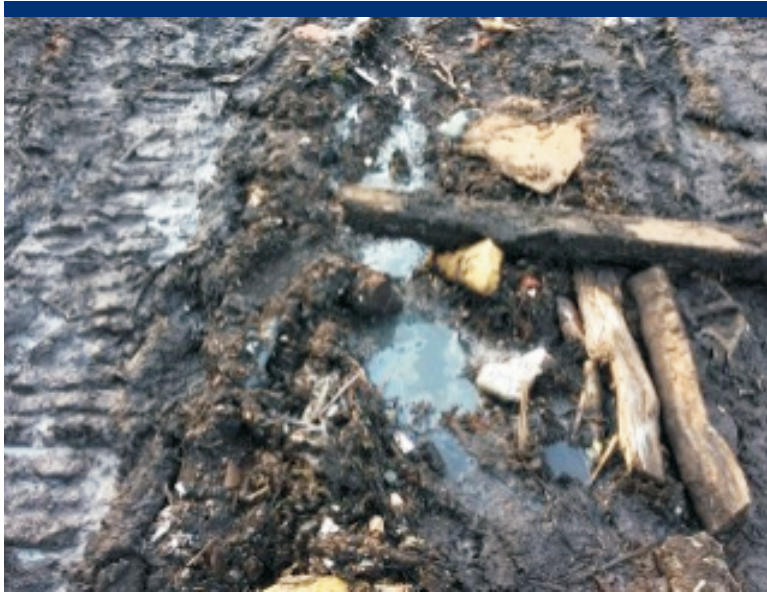


Photo 13 Oil sheening was visible in several puddles on site pathways through the debris piles.

Direction: Northwest *Date:* 2/25/16 *Time:* 16:00

ATTACHMENT B – Chain-of-Custody Documentation

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JHFR0

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 10-022916-100644-0007

Date Shipped: 2/29/2016

Lab: Shealy Environmental Services

Carrier Name: FedEx

Lab Contact: Robert Zhu

Airbill No: 8020 0694 1475

Case #: 46026

Lab Phone: 803-791-9700

Cooler #: SVOC PEST/PCB

EPW 14025

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
16084601	JHFR0	Soil Surface/ EMC	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1002 (None), 1003 (None) (2)	TA01SS	02/25/2016 12:59	
16084602	JHFR1	Soil Surface/ EMC	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1016 (None), 1017 (None) (2)	TA02SS	02/25/2016 14:13	
16084611	JHFR10	Soil Surface/ EOL	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1095 (None), 1096 (None) (2)	TB01SS	02/25/2016 14:15	
16084612	JHFR11	Soil Surface/ BHM	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1175 (None), 1176 (None) (2)	TD01SS	02/25/2016 14:57	
16084613	JHFR12	Soil Surface/ BHM	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1111 (None), 1112 (None) (2)	TD02SS	02/25/2016 15:24	
16084614	JHFR13	Soil Surface/ BHM	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1119 (None), 1120 (None) (2)	TD03SS	02/25/2016 15:42	
16084615	JHFR14	Soil Surface/ BHM	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1127 (None), 1128 (None) (2)	TD04SS	02/25/2016 16:03	
16084616	JHFR15	Soil Surface/ EOL	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1135 (None), 1136 (None) (2)	TB02SS	02/25/2016 15:55	
16084617	JHFR16	Soil Surface/ CRW	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1143 (None), 1144 (None) (2)	TB03SS	02/25/2016 16:50	
16084603	JHFR2	Soil Surface/ EMC	Grab	CLP PEST/PCB(21), CLP SVSIM(21)	1031 (None), 1032 (None) (2)	TA03SS	02/25/2016 14:57	

Sample(s) to be used for Lab QC: 16084601 Tag 1002, 16084601 Tag 1003 - Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CLP PEST/PCB=CLP TCL Pesticides/PCBs (TAT 21 Days), CLP SVSIM=CLP TCL Semivolatiles - SIM

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Vanden / START	2/29/16 1200			
			Melinda McDonald	3/1/16 1000	OK

T=2.4 °C

3565

CHAIN OF CUSTODY RECORD

No: 10-022916-100644-0007

Lab: Shealy Environmental Services

Case #: 46026

Lab Contact: Robert Zhu

Cooler #: SVOC PEST/PCB

Lab Phone: 803-791-9700

[illegible]

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CLP PEST/PCB=CLP TCL Pesticides/PCBs (TAT 21 Days), CLP SVSIM=CLP TCL Semivolatiles - SIM

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Vorden / START	2/29/16 1200			
			Melinda McDonald	3/1/16 ¹⁰⁰⁰	OK

$$T = 2.4^{\circ}\text{C}$$

3566

USEPA CLP COC (LAB COPY)

Date Shipped: 2/29/2016

Carrier Name: FedEx

Airbill No: 8020 0694 1486

CHAIN OF CUSTODY RECORD

Case #: 46026

Cooler #: VOCs

JHFR0

No: 10-022916-101309-0008

Lab: Shealy Environmental Services

Lab Contact: Robert Zhu

Lab Phone: 803-791-9700

EPW 14005

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
16084601	JHFR0	Soil Surface/ EMC	Grab	CLP VOA(21)	1004 (None), 1005 (None), 1006 (None), 1007 (None), 1008 (None), 1009 (None), 1010 (None), 1011 (None), 1012 (None), 1013 (None) (10)	TA01SS	02/25/2016 12:59	
16084602	JHFR1	Soil Surface/ EMC	Grab	CLP VOA(21)	1018 (None), 1019 (None), 1020 (None), 1021 (None) (4)	TA02SS	02/25/2016 14:13	
16084611	JHFR10	Soil Surface/ EOL	Grab	CLP VOA(21)	1097 (None), 1098 (None), 1099 (None), 1100 (None) (4)	TB01SS	02/25/2016 14:15	
16084612	JHFR11	Soil Surface/ BHM	Grab	CLP VOA(21)	1177 (None), 1178 (None), 1179 (None), 1180 (None) (4)	TD01SS	02/25/2016 14:57	
16084613	JHFR12	Soil Surface/ BHM	Grab	CLP VOA(21)	1113 (None), 1114 (None), 1115 (None), 1116 (None) (4)	TD02SS	02/25/2016 15:24	
16084614	JHFR13	Soil Surface/ BHM	Grab	CLP VOA(21)	1121 (None), 1122 (None), 1123 (None), 1124 (None) (4)	TD03SS	02/25/2016 15:42	
16084615	JHFR14	Soil Surface/ BHM	Grab	CLP VOA(21)	1129 (None), 1130 (None), 1131 (None), 1132 (None) (4)	TD04SS	02/25/2016 16:03	
16084616	JHFR15	Soil Surface/ EOL	Grab	CLP VOA(21)	1137 (None), 1138 (None), 1139 (None), 1140 (None) (4)	TB02SS	02/25/2016 15:55	
16084617	JHFR16	Soil Surface/ CRW	Grab	CLP VOA(21)	1145 (None), 1146 (None), 1147 (None), 1148 (None) (4)	TB03SS	02/25/2016 16:50	

Sample(s) to be used for Lab QC: 16084601 Tag 1004, 16084601 Tag 1005, 16084601 Tag 1006, 16084601 Tag 1007, 16084601 Tag 1008, 16084601 Tag 1009, 16084601 Tag 1010, 16084601 Tag 1011, 16084601 Tag 1012, 16084601 Tag 1013 - Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: CLP VOA=CLP TCL Volatiles

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Yorden (START)	2/29/16 1200			
			Michael McDonald	3/1/16 1000	OK

T = 2.7 °C

3568

No: 10-022916-101309-0008

Lab Contact: Robert Zhu

Lab Phone: 803-791-9700

<p>Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.</p>	<p>Shipment for Case Complete? Y</p> <p>Samples Transferred From Chain of Custody #</p>
<p>Analysis Key: CLP VOA=CLP TCL Volatiles</p>	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Worden 1START	2/29/16 1200			
			Melinda McDonald	3/1/16 1000	OK

$$T = 2.7^\circ\text{C}$$

2569

SDG #: MJHFR0

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 10-022916-100127-0006

Date Shipped: 2/29/2016

Lab: ChemTech Consulting Group

Carrier Name: FedEx

Lab Contact: Divya Mehta

Airbill No: 8020 0694 1464

Case #: 46026

Lab Phone: 908-789-8900

Cooler #: TAL Metals

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
16084601	MJHFR0	Soil Surface/ EMC	Grab	ICP-AES(21)	1000 (None) (1)	TA01SS	02/25/2016 12:59	★ QC
16084602	MJHFR1	Soil Surface/ EMC	Grab	ICP-AES(21)	1014 (None) (1)	TA02SS	02/25/2016 14:13	
16084611	MJHFR10	Soil Surface/ EOL	Grab	ICP-AES(21)	1093 (None) (1)	TB01SS	02/25/2016 14:15	
16084612	MJHFR11	Soil Surface/ BHM	Grab	ICP-AES(21)	1173 (None) (1)	TD01SS	02/25/2016 14:57	
16084613	MJHFR12	Soil Surface/ BHM	Grab	ICP-AES(21)	1109 (None) (1)	TD02SS	02/25/2016 15:24	
16084614	MJHFR13	Soil Surface/ BHM	Grab	ICP-AES(21)	1117 (None) (1)	TD03SS	02/25/2016 15:42	
16084615	MJHFR14	Soil Surface/ BHM	Grab	ICP-AES(21)	1125 (None) (1)	TD04SS	02/25/2016 16:03	
16084616	MJHFR15	Soil Surface/ EOL	Grab	ICP-AES(21)	1133 (None) (1)	TB02SS	02/25/2016 15:55	
16084617	MJHFR16	Soil Surface/ CRW	Grab	ICP-AES(21)	1141 (None) (1)	TB03SS	02/25/2016 16:50	
16084603	MJHFR2	Soil Surface/ EMC	Grab	ICP-AES(21)	1029 (None) (1)	TA03SS	02/25/2016 14:57	

Sample(s) to be used for Lab QC: 16084601 Tag 1000 - Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES=CLP TAL Metals ICP-AES (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Nodder - 1 START	2/29/16 12:00			
	FedEx	10:00 3-1-16	C. Lora	10:00 3-1-16	B.C.

CHAIN OF CUSTODY RECORD

Lab: ChemTech Consulting Group

Case #: 46026

Lab Contact: Divya Mehta

Cooler #: TAL Metals

Lab Phone: 908-789-8900

[illegible]

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES=CLP TAL Metals ICP-AES (Incl. Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Riverlea I START	2/29/16 1200			
	FAXED	10:00 3-1-16	[Signature]	10:00 3-1-16	3 ✓

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

JHFR0

No: 10-022916-101309-0008

Date Shipped: 2/29/2016

Lab: Shealy Environmental Services

Carrier Name: FedEx

Lab Contact: Robert Zhu

Airbill No: 8020 0694 1486

Case #: 46026

Lab Phone: 803-791-0700

Cooler #: VOCs

3731 4465 6892

EPW 14005

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
16084601	JHFR0	Soil Surface/ EMC	Grab	CLP VOA(21) HHT 11	1084 (None), 1005 (None), 1006 (None), 1007 (None), 1008 (None), 1009 (None), 1010 (None), 1011 (None), 1012 (None), 1013 (None) (10)	TA01SS	02/25/2016 12:59	
16084602	JHFR1	Soil Surface/ EMC	Grab	CLP VOA(21) 1	1018 (None), 1019 (None), 1020 (None), 1021 (None) (4)	TA02SS	02/25/2016 14:13	
16084611	JHFR10	Soil Surface/ EOL	Grab	CLP VOA(21) 11	1097 (None), 1098 (None), 1099 (None), 1100 (None) (4)	TB01SS	02/25/2016 14:15	
16084612	JHFR11	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1177 (None), 1178 (None), 1179 (None), 1180 (None) (4)	TD01SS	02/25/2016 14:57	
16084613	JHFR12	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1113 (None), 1114 (None), 1115 (None), 1116 (None) (4)	TD02SS	02/25/2016 15:24	
16084614	JHFR13	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1121 (None), 1122 (None), 1123 (None), 1124 (None) (4)	TD03SS	02/25/2016 15:42	
16084615	JHFR14	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1129 (None), 1130 (None), 1131 (None), 1132 (None) (4)	TD04SS	02/25/2016 16:03	
16084616	JHFR15	Soil Surface/ EOL	Grab	CLP VOA(21) 11	1137 (None), 1138 (None), 1139 (None), 1140 (None) (4)	TB02SS	02/25/2016 15:55	
16084617	JHFR16	Soil Surface/ CRW	Grab	CLP VOA(21)	1145 (None), 1146 (None), 1147 (None), 1148 (None) (4)	TB03SS	02/25/2016 16:50	

Sample(s) to be used for Lab QC: 16084601 Tag 1004, 16084601 Tag 1005, 16084601 Tag 1006, 16084601 Tag 1007, 16084601 Tag 1008, 16084601 Tag 1009, 16084601 Tag 1010, 16084601 Tag 1011, 16084601 Tag 1012, 16084601 Tag 1013 - Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: CLP VOA=CLP TCL Volatiles

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Vorden (START)	2/29/16 1200			
	Long Boulton	4/15/16 1800	Fedex	4/15/16 1800	
			Michelle McDonald	3/1/16 1000	OK

T = 2.7 °C

Recd @ MEL & Nelson 4/22/16 @ 1530

No: 10-022916-101309-0008

Lab: Shealy Environmental Services

Case #: 46026

Lab Contact: Robert Zhu

Cooler #: VOCs

Lab Phone: 803-791-9700

8731 4405 6892

EPW 14B5

[illegible]

Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

Analysis Key: CLP VOA=CLP TCL Volatiles

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	RWanda I START	2/29/16 1200			
	Larry Boulting	4/15/16 1800	FedEx	4/15/16 1800	
			Melinda McDonald	3/1/16 1000	OK

16
10-17

Recd MEL + Nader 4/22/16 @ 1530 $T=2.7^{\circ}\text{C}$

$$T = 2.7^\circ\text{C}$$

2519

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

JHFR0

No: 10-022916-101309-0008

Date Shipped: 2/29/2016

Lab: Shealy Environmental Services

Carrier Name: FedEx

Lab Contact: Robert Zhu

Airbill No: 8020 0694 1486

Case #: 46026

Lab Phone: 803-791-0700

Cooler #: VOCs

3731 4465 6892

EPW 14005

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
16084601	JHFR0	Soil Surface/ EMC	Grab	CLP VOA(21) HHT 11	1084 (None), 1005 (None), 1006 (None), 1007 (None), 1008 (None), 1009 (None), 1010 (None), 1011 (None), 1012 (None), 1013 (None) (10)	TA01SS	02/25/2016 12:59	
16084602	JHFR1	Soil Surface/ EMC	Grab	CLP VOA(21) 1	1018 (None), 1019 (None), 1020 (None), 1021 (None) (4)	TA02SS	02/25/2016 14:13	
16084611	JHFR10	Soil Surface/ EOL	Grab	CLP VOA(21) 11	1097 (None), 1098 (None), 1099 (None), 1100 (None) (4)	TB01SS	02/25/2016 14:15	
16084612	JHFR11	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1177 (None), 1178 (None), 1179 (None), 1180 (None) (4)	TD01SS	02/25/2016 14:57	
16084613	JHFR12	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1113 (None), 1114 (None), 1115 (None), 1116 (None) (4)	TD02SS	02/25/2016 15:24	
16084614	JHFR13	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1121 (None), 1122 (None), 1123 (None), 1124 (None) (4)	TD03SS	02/25/2016 15:42	
16084615	JHFR14	Soil Surface/ BHM	Grab	CLP VOA(21) 1	1129 (None), 1130 (None), 1131 (None), 1132 (None) (4)	TD04SS	02/25/2016 16:03	
16084616	JHFR15	Soil Surface/ EOL	Grab	CLP VOA(21) 11	1137 (None), 1138 (None), 1139 (None), 1140 (None) (4)	TB02SS	02/25/2016 15:55	
16084617	JHFR16	Soil Surface/ CRW	Grab	CLP VOA(21)	1145 (None), 1146 (None), 1147 (None), 1148 (None) (4)	TB03SS	02/25/2016 16:50	

Sample(s) to be used for Lab QC: 16084601 Tag 1004, 16084601 Tag 1005, 16084601 Tag 1006, 16084601 Tag 1007, 16084601 Tag 1008, 16084601 Tag 1009, 16084601 Tag 1010, 16084601 Tag 1011, 16084601 Tag 1012, 16084601 Tag 1013 - Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: CLP VOA=CLP TCL Volatiles

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. Vorden (START)	2/29/16 1200			
	Long Boulton	4/15/16 1800	Fedex	4/15/16 1800	
			Melinda McDonald	3/1/16 1000	OK

T = 2.7 °C

Recd @ MEL & Nelson 4/22/16 @ 1530

No: 10-022916-101309-0008

Lab: Shealy Environmental Services

Case #: 46026

Lab Contact: Robert Zhu

Cooler #: VOCs

Lab Phone: 803-791-9700

8731 4405 6892

EPW 14B5

[illegible]

Special Instructions: No remaining sample material shall be disposed of. All unused sample material must be retained for return under custody to Region 10 and all samples will be returned in the coolers that were originally sent.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

Analysis Key: CLP VOA=CLP TCL Volatiles

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	R. W. Allen 1ST ART	2/29/16 1200			
	Long Building	4/15/16 1800	FedEx	4/15/16 1800	
			Melinda McDonald	3/1/16 1000	OK

16
10-17

Recd MEL + Nader 4/22/16 @ 1530 $T = 2.7^{\circ}\text{C}$

$$T = 2.7^\circ\text{C}$$

2519

EPA R10 Lab (MEL) COC (REGION COPY)

DateShipped: 2/26/2016

CarrierName: hand delivery

AirbillNo: NA

CHAIN OF CUSTODY RECORD

May Creek Landfill/WA

Project Code: SFP-104A

Cooler #: Split

No: 10-022616-115304-0002

Account Number: 2016T10P303DD210ZZLA00

Contact Name: Brad Martin

Contact Phone: 206-419-9780

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
16084601		Soil Surface/ EMC	Grab	SPLIT(365)	N2 (None) (1)	TA01SS	02/25/2016 12:59	Lab QC
16084602		Soil Surface/ EMC	Grab	SPLIT(365)	N2 (None) (1)	TA02SS	02/25/2016 14:13	Field Sample
16084603		Soil Surface/ EMC	Grab	SPLIT(365)	N2 (None) (1)	TA03SS	02/25/2016 14:57	Field Sample
16084604		Soil Surface/ EMC	Grab	SPLIT(365)	N2 (None) (1)	TA04SS	02/25/2016 15:34	Field Sample
16084605		Soil Surface/ EMC	Grab	SPLIT(365)	N2 (None) (1)	TA05SS	02/25/2016 16:09	Field Sample
16084610		Soil Surface/ BHM	Grab	SPLIT(365)	N2 (None) (1)	TD05SS	02/25/2016 16:47	Background
16084611		Soil Surface/ EOL	Grab	SPLIT(365)	N2 (None) (1)	TB01SS	02/25/2016 14:15	Field Sample
16084612		Soil Surface/ BHM	Grab	SPLIT(365)	N2 (None) (1)	TD01SS	02/25/2016 14:57	Field Sample
16084613		Soil Surface/ BHM	Grab	SPLIT(365)	N2 (None) (1)	TD02SS	02/25/2016 15:24	Field Sample
16084614		Soil Surface/ BHM	Grab	SPLIT(365)	N2 (None) (1)	TD03SS	02/25/2016 15:42	Field Sample


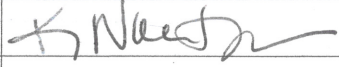
Sample(s) to be used for Lab QC: 16084601 Tag N2 - Special Instructions: Custody Tag 0060299

Hold at laboratory.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SPLIT=SPLIT

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	 EJE	2/26/16 1510	 K. Naest	2/26/16 1510	

Seal # 0060299

EPA R10 Lab (MEL) COC (REGION COPY)

DateShipped: 2/26/2016

CarrierName: hand delivery

AirbillNo: NA

CHAIN OF CUSTODY RECORD

May Creek Landfill/WA

Project Code: SFP-104A

Cooler #: Split

No: 10-022616-115304-0002

Account Number: 2016T10P303DD210ZZLA00

Contact Name: Brad Martin

Contact Phone: 206-419-9780

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
16084615		Soil Surface/ BHM	Grab	SPLIT(365)	N2 (None) (1)	TD04SS	02/25/2016 16:03	Field Sample
16084616		Soil Surface/ EOL	Grab	SPLIT(365)	N2 (None) (1)	TB02SS	02/25/2016 15:55	Field Sample
16084617		Soil Surface/ CRW	Grab	SPLIT(365)	N2 (None) (1)	TB03SS	02/25/2016 16:50	Field Sample



Special Instructions: Custody Tag 0060299

Hold at laboratory.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SPLIT=SPLIT

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	 EHE	2/26/16 1510		2/26/16 1510	

Seal # 0060299

EPA R10 Lab (MEL) COC (REGION COPY)

DateShipped: 2/26/2016

CarrierName: hand delivery

AirbillNo: NA

CHAIN OF CUSTODY RECORD

May Creek Landfill/WA

Project Code: IEC-104A

SFP- Cooler #: TCLP

104A

No: 10-022616-122503-0005

Account Number: 2016T10P303DD210ZZLA00

Contact Name: Brad Martin

Contact Phone: 206-419-9780

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
16084601	MJHFR0	Soil Surface/ EMC	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TA01SS	02/25/2016 12:59	Lab QC
16084602	MJHFR1	Soil Surface/ EMC	Grab	TCLP ICP-AES(21)	1197 (None) (1) N3	TA02SS	02/25/2016 14:13	Field Sample
16084603	MJHFR2	Soil Surface/ EMC	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TA03SS	02/25/2016 14:57	Field Sample
16084604	MJHFR3	Soil Surface/ EMC	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TA04SS	02/25/2016 15:34	Field Sample
16084605	MJHFR4	Soil Surface/ EMC	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TA05SS	02/25/2016 16:09	Field Sample
16084610	MJHFR9	Soil Surface/ BHM	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TD05SS	02/25/2016 16:47	Background
16084611	MJHFT1	Soil Surface/ EOL	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TB01SS	02/25/2016 14:15	Field Sample
16084612	MJHFT2	Soil Surface/ BHM	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TD01SS	02/25/2016 14:57	Field Sample
16084613	MJHFT3	Soil Surface/ BHM	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TD02SS	02/25/2016 15:24	Field Sample
16084614	MJHFT4	Soil Surface/ BHM	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TD03SS	02/25/2016 15:42	Field Sample

Sample(s) to be used for Lab QC: 16084601 Tag N3 - Special Instructions: Custody Tag 0060222

Hold at Laboratory

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TCLP ICP-AES=CLP TCLP ICP-AES Metals + Hg

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	<i>Jeff Feltz ETE</i>	2/26/16 1510	<i>H. Nestor</i>	2/26/16 1510	

Seal # 0060222

EPA R10 Lab (MEL) COC (REGION COPY)

DateShipped: 2/26/2016

CarrierName: hand delivery

AirbillNo: NA

CHAIN OF CUSTODY RECORD

May Creek Landfill/WA

Project Code: ~~TE~~-104A

Cooler #: TCLP

SFP-104A
for 2/26/16

No: 10-022616-122503-0005

Account Number: 2016T10P303DD210ZZLA00

Contact Name: Brad Martin

Contact Phone: 206-419-9780

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
16084615	MJHFT5	Soil Surface/ BHM	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TD04SS	02/25/2016 16:03	Field Sample
16084616	MJHFT6	Soil Surface/ EOL	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TB02SS	02/25/2016 15:55	Field Sample
16084617	MJHFT7	Soil Surface/ CRW	Grab	TCLP ICP-AES(21)	N3 (None) (1)	TB03SS	02/25/2016 16:50	Field Sample

Special Instructions: Custody Tag 0060222

Hold at Laboratory

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TCLP ICP-AES=CLP TCLP ICP-AES Metals + Hg

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	<i>[Signature]</i> EHE	2/26/16 1510	<i>[Signature]</i>	2/26/16 1510	

Seal # 0060222

**ATTACHMENT C – Analytical Results and Data Validation
Memoranda**

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EPA Sample ID		16084610	16084601	16084602	16084603	16084604	16084605	16084615	16084611	16084616	16084617	16084612	16084613	16084614
Station Location		TD05SS	TA01SS	TA02SS	TA03SS	TA04SS	TA05SS	TD04SS	TB01SS	TB02SS	TB03SS	TD01SS	TD02SS	TD03SS
Organic CLP Sample ID		JHFR9	JHFR0	JHFR1	JHFR2	JHFR3	JHFR4	JHF14	JHF10	JHF15	JHF16	JHF11	JHF12	JHF13
Inorganic CLP Sample ID		MJHFR9	MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4	MJHFR14	MJHFR10	MJHFR15	MJHFR16	MJHFR11	MJHFR12	MJHFR13
Description		Background	Landfill Area						Workshop Area			Bus/RV Area		
Aroclor-1016	Aroclor	47 U	55 U A	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	69 U
Aroclor-1221	Aroclor	47 U	55 U	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	69 U
Aroclor-1232	Aroclor	47 U	55 U	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	69 U
Aroclor-1242	Aroclor	47 U	17 JQ	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	17 JK
Aroclor-1248	Aroclor	47 U	55 U	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	69 U
Aroclor-1254	Aroclor	47 U	55 U	39 U	68 U	48 U	52 U	39 JK	28 JQ	7.4 JQ	60	140 U	21 JQ	69 U
Aroclor-1260	Aroclor	1.8 JK	9.6 JK	6.9 JK	68 U	48 U	2.6 JQ	77 U	54 U	37 U	100	140 U	19 JK	9.3 JK
Aroclor-1262	Aroclor	47 U	55 U	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	69 U
Aroclor-1268	Aroclor	47 U	55 U	39 U	68 U	48 U	52 U	77 U	54 U	37 U	36 U	140 U	40 U	69 U
Mercury	Hg	0.081 JQ	0.061 JQ	0.08 JQ	0.19	0.13 JQ	0.094 JQ	0.22 JQ	0.1 JQ	0.042 JQ	0.05 JQ	0.02 JQ	0.057 JQ	0.12 JQ
Aluminum	ICP_AES	15500	7200	4300	13300	9980	19100	8520	7340	15000	10300	1020	9520	7210
Antimony	ICP_AES	0.47 JQ	0.59 JQ	4.9 UJL	0.63 JQ	0.78 JQ	0.65 JQ	1.8 JQ	2.7 JQ	0.6 JQ	0.87 JQ	6 UJL	1.5 JQ	1.3 JQ
Arsenic	ICP_AES	7.6	4.3	2.1	7	8.6	10.6	10.4	18.6	3.4	4.3	0.99 U	5.8	12.4
Barium	ICP_AES	123	64.9	39.2	109	72.7	156	113	154	109	80.8	32.8	55.7	98.9
Beryllium	ICP_AES	0.4 JQ	0.22 JQ	0.13 JQ	0.46 JQ	0.31 JQ	0.54	0.26 JQ	0.056 JQ	0.32 JQ	0.29 JQ	0.065 JQ	0.33 JQ	0.21 JQ
Cadmium	ICP_AES	0.6	0.87	0.76	0.82	0.67	0.94	0.81 JQ	2.8	1.3	12	0.12 JQ	2.6	0.69
Calcium	ICP_AES	3220	5820	4070	10000	5970	5760	22500	21200	8840	5270	21300	5800	16400
Chromium	ICP_AES	19.5	18.8	16.8	25.9	26.4	31.6	34.8	23.4	32.4	51.6	1.6	22.6	26.5
Cobalt	ICP_AES	5.6	4.5 JQ	2.8 JQ	7.7	6.5	11.4	5.5 JQ	7.7	11	9.7	0.68 JQ	7	4.2 JQ
Copper	ICP_AES	15.5 JH	30.4 JH	49.8 JH	36.9 JH	30.1 JH	57.4 JH	50 JH	120 JH	61 JH	80.3 JH	15.5 JH	55.5 JH	42.1 JH
Iron	ICP_AES	15100	11200	8810	18900	15600	25100	12600	13500	21200	22400	1770	27100	10400
Lead	ICP_AES	17	32.5	29.7	31.4	23.2	15.7	52.9	143	68.5	155	0.9 JQ	60	42.2
Magnesium	ICP_AES	2380	3000	1680	3630	4760	6960	3660	3340	8220	6410	7910	3330	3000
Manganese	ICP_AES	883 JH	212 JH	154 JH	420 JH	338 JH	491 JH	318 JH	5710 JH	336 JH	315 JH	124 JH	333 JH	245 JH
Nickel	ICP_AES	18.1	22.3	12.1	21.2	24.3	28.5	23.1	28	27.9	25.4	1.7 JQ	23.6	19.1
Potassium	ICP_AES	604	502 JQ	420	1160	796	3000	918	829	1210	637	2190	551	754
Selenium	ICP_AES	0.77 JQ	0.67 JQ	0.87 JQ	0.77 JQ	1.3 JQ	0.52 JQ	1.7 JQ	0.7 JQ	0.76 JQ	3.3	0.47 JQ	0.87 JQ	1.1 JQ
Silver	ICP_AES	0.98 U	1.1 U	0.81 U	1.5 U	1 U	1.1 U	1.7 U	1.1 U	0.85 U	0.81 U	0.99 U	0.79 U	1.3 U
Sodium	ICP_AES	70.6 JQ	198 JQ	238 JQ	160 JQ	147 JQ	211 JQ	237 JQ	286 JQ	438	415	660	276 JQ	205 JQ
Thallium	ICP_AES	1.1 JQ	0.49 JQ	2 U	0.91 JQ	0.84 JQ	1.7 JQ	4.2 U	2.8 U	0.76 JQ	0.63 JQ	2.5 U	0.92 JQ	3.1 U
Vanadium	ICP_AES	34.9	28.5	15.9	47.3	35.1	54.7	30.3	28.4	39.9	38.8	2.3 JQ	29.9	24.3
Zinc	ICP_AES	47	106	98.5	123	103	83.3	193	531	118	163	28.1	238	153
4,4'-DDD	Pest	4.7 U	4 JK	3.9 U	1 JK	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	12 JK	13 U	3.9 U	6.8 U
4,4'-DDE	Pest	4.7 U	6.2 JK	3.9 U	4.3 JQ	0.77 JK	2.9 JQ	8.9 JK	2.5 JK	3.8 U	1.8 JQ	13 U	3.9 U	14 JK
4,4'-DDT	Pest	4.7 U	7.6 JK	0.93 JQ	5.4 JQ	5.7	2.2 JK	14 JL	7.6 JK	0.95 JQ	6.1 JL	13 U	3.1 JK	17 JK
Aldrin	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	1.8 U	6.9 U	2 U	0.94 JQ
alpha-BHC	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	1.8 U	6.9 U	2 U	3.5 U
beta-BHC	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	9.5 JK	6.9 U	2 U	3.5 U
cis-Chlordane	Pest	2.4 U	2.3 JK	1.1 JQ	1.2 JQ	1.7 JK	2 JQ	4.4 JL	2.1 JQ	0.71 JQ	1.8 U	6.9 U	2 U	7.3 JK
delta-BHC	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	1.4 JQ	6.9 U	2 U	3.5 U
Dieldrin	Pest	4.7 U	6.5 JK	1.8 JQ	5 JQ	7.8 U	1.9 JQ	16 JK	7.6 JK	3.8 U	3.6 U	13 U	3.9 U	11 U
Endosulfan I	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	1.5 JQ	6.9 U	2 U	3.5 U
Endosulfan II	Pest	4.7 U	5.4 U	3.9 U	6.8 U	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	11 JK	13 U	3.9 U	6.8 U
Endosulfan sulfate	Pest	4.7 U	5.4 U	0.33 JK	6.8 U	0.47 JQ	5.3 U	7.8 U	5.5 U	3.8 U	6.4 JL	13 U	3.9 U	6.8 U
Endrin	Pest	4.7 U	5.4 U	3.9 U	6.8 U	4.8 U	5.3 U	1.6 JQ	5.5 U	3.8 U	3.6 U	13 U	3.9 U	6.8 U
Endrin aldehyde	Pest	4.7 U	5.4 U	3.9 U	6.8 U	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	4.3 JK	13 U	3.9 U	2.5 JQ
Endrin ketone	Pest	4.7 U	5.4 U	3.9 U	6.8 U	4.8 U	5.3 U	7.8 U	5.5 U	3.8 U	3.6 U	13 U	3.9 U	6.8 U
gamma-BHC (Lindane)	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4.4 U	2.8 U	1.9 U	0.48 JQ	6.9 U	2 U	3.5 U
Heptachlor	Pest	2.4 U	2.8 U	2 U	3.5 U	2.4 U	2.7 U	4 U	2.8 U	1.9 U	2.3 JK	6.9 U	2 U	3.5 U
Heptachlor epoxide	Pest	2.4 U	0.6 JQ	2 U	1.5 JQ	0.73 JQ	0.78 JQ	4.1 U	2.8 U	1.9 U	6.3 JK	6.9 U	2 U	3.5 U
Methoxychlor	Pest	24 U	28 U	20 U	35 U	24 U	27 U	40 U	28 U	0.75 JQ	18 U	69 U	20 U	35 U
Toxaphene	Pest	240 U	280 U	200 U	350 U	240 U	270 U	400 U	280 U	190 U	180 U	690 U	200 U	350 U
trans-Chlordane	Pest	2.4 U	2.8 U	0.99 JK	3.5 U	2.4 U	1.8 JK	4.6 U	2.8 U	1.9 U	1.8 U	6.9 U	2 U	18 U
1,1'-Biphenyl	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U

EPA Sample ID		16084610	16084601	16084602	16084603	16084604	16084605	16084615	16084611	16084616	16084617	16084612	16084613	16084614
Station Location		TD05SS	TA01SS	TA02SS	TA03SS	TA04SS	TA05SS	TD04SS	TB01SS	TB02SS	TB03SS	TD01SS	TD02SS	TD03SS
Organic CLP Sample ID		JHFR9	JHFR0	JHFR1	JHFR2	JHFR3	JHFR4	JHF14	JHF10	JHF15	JHF16	JHF11	JHF12	JHF13
Inorganic CLP Sample ID		MJHFR9	MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4	MJHFR14	MJHFR10	MJHFR15	MJHFR16	MJHFR11	MJHFR12	MJHFR13
Description		Background	Landfill Area						Workshop Area			Bus/RV Area		
1,2,4,5-Tetrachlorobenzene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
1,4-Dioxane	SVOA	100 UJK	580 UJK	420 UJK	140 UJK	100 UJK	110 UJK	830 UJK	580 UJK	78 UJK	3000 UJK	290 UJK	410 UJK	730 UJK
2,2'-Oxybis(1-chloropropane)	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
2,3,4,6-Tetrachlorophenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2,4,5-Trichlorophenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2,4,6-Trichlorophenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2,4-Dichlorophenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2,4-Dimethylphenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2,4-Dinitrophenol	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
2,4-Dinitrotoluene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2,6-Dinitrotoluene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2-Chloronaphthalene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2-Chlorophenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2-Methylnaphthalene	SVOA	4.7 U	27 U	20 U	3.1 JQ	4.9	5.1 U	140	27 U	3.7 U	220 JH	13 U	19 U	35 U
2-Methylphenol	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
2-Nitroaniline	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
2-Nitrophenol	SVOA	240 U		1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
3,3'-Dichlorobenzidine	SVOA	470 UJK	2700 UJK	2000 UJK	680 UJK	480 UJK	510 UJK	3900 UJK	2700 UJK	370 UJK	14000 UJK	1300 UJK	1900 UJK	3500 UJK
3-Nitroaniline	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
4,6-Dinitro-2-methylphenol	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 UJK	1300 U	1900 U	3500 U
4-Bromophenyl-phenylether	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
4-Chloro-3-methylphenol	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
4-Chloroaniline	SVOA	470 U	2700 UJK	2000 U	680 U	480 U	510 U	3900 UJK	2700 UJK	370 U	14000 UJK	1300 U	1900 UJK	3500 U
4-Chlorophenyl-phenyl ether	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
4-Methylphenol	SVOA	470 U	1500 JQ	2000 U	680 U	480 U	510 U	500 JQ	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
4-Nitroaniline	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
4-Nitrophenol	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Acenaphthene	SVOA	4.7 U	4.4 JQ	3.8 JQ	33	67	5.1 U	160	6.1 JQ	0.97 JQ	140 U	13 U	1.9 JQ	39
Acenaphthylene	SVOA	4.7 U	6.9 JQ	4.7 JQ	23	32	0.98 JQ	81	15 JQ	4.3	140 U	13 U	4.1 JQ	14 JQ
Acetophenone	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Anthracene	SVOA	1.3 JQ	20 JQ	14 JQ	330	330	2 JQ	310	31	8.4	80 JQ	13 U	13 JQ	130
Atrazine	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 UJK	1300 U	1900 U	3500 U
Benzaldehyde	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Benzo(a)anthracene	SVOA	1.4 JQ	150 JK	56 JK	370	710	1.7 JQ	310 JK	95 JK	18 JK	140 UJK	13 U	19 JK	290 JK
Benzo(a)pyrene	SVOA	1.2 JQ	130	62	380 JK	770 JK	2.4 JQ	270	110	24	86 JQ	13 U	23	310
Benzo(b)fluoranthene	SVOA	4.2 JQ	330	92	780 JK	1500 JK	6.8	500	170	31	480	1.9 JQ	42	600
Benzo(g,h,i)perylene	SVOA	2.5 JK	51 JK	35 JK	320	480	5 JK	84 JK	54 JK	12 JK	120 JK	13 JQ	29 JK	110 JK
Benzo(k)fluoranthene	SVOA	0.97 JQ	27 U	28	350 JK	480	2 JQ	190	53	14	140 U	13 U	16 JQ	200
Bis(2-chloroethoxy)methane	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Bis(2-Chloroethyl) ether	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Bis(2-ethylhexyl)phthalate	SVOA	240 U	1000 JQ	200 JQ	270 JQ	490	260 U	1500 JQ	560 JQ	160 JQ	17000	690 U	350 JQ	1000 JQ
Butylbenzylphthalate	SVOA	240 U	1400 JK	190 JQ	350 U	250 U	260 U	2000 UJK	1400 U	120 JQ	7400 U	690 U	190 JQ	1800 U
Caprolactam	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Carbazole	SVOA	470 U	2700 U	2000 U	110 JQ	210 JQ	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Chrysene	SVOA	3.3 JQ		53 JK	430	860	3.3 JQ	510 JK	150 JK	25 JK	240 JK	13 U	19 JK	420 JK
Dibenzo(a,h)anthracene	SVOA	4.7 U	27 U	20 U	6.8 U	4.8 U	5.1 U	39 U	27 U	3.7 U	140 U	13 U	19 U	35 U
Dibenzofuran	SVOA	240 U	1400 U	1000 U	350 U	34 JQ	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Diethylphthalate	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Dimethylphthalate	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Di-n-butylphthalate	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	280 JQ	1200 JQ	82 JQ	1700 JQ	690 U	110 JQ	230 JQ
Di-n-octylphthalate	SVOA	470 U	2700 UJK	2000 UJK	680 UJK	480 UJK	510 U	3900 UJK	2700 U	370 UJK	14000 UJK	1300 UJK	1900 UJK	3500 UJK
Fluoranthene	SVOA	3.4 JQ	120	100	1100	2300	2.8 JQ	1100	110	30	200	10 JQ	50	850
Fluorene	SVOA	4.7 U	27 U	20 U	48	100	5.1 U	120	27 U	3.7 U	140 U	13 U	19 U	57
Hexachlorobenzene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 UJK	690 U	1000 U	1800 U

EPA Sample ID		16084610	16084601	16084602	16084603	16084604	16084605	16084615	16084611	16084616	16084617	16084612	16084613	16084614
Station Location		TD05SS	TA01SS	TA02SS	TA03SS	TA04SS	TA05SS	TD04SS	TB01SS	TB02SS	TB03SS	TD01SS	TD02SS	TD03SS
Organic CLP Sample ID		JHFR9	JHFR0	JHFR1	JHFR2	JHFR3	JHFR4	JHF14	JHF10	JHF15	JHF16	JHF11	JHF12	JHF13
Inorganic CLP Sample ID		MJHFR9	MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4	MJHFR14	MJHFR10	MJHFR15	MJHFR16	MJHFR11	MJHFR12	MJHFR13
Description		Background	Landfill Area						Workshop Area			Bus/RV Area		
Hexachlorobutadiene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Hexachlorocyclo-pentadiene	SVOA	470 UJK	2700 UJK	2000 UJK	680 UJK	480 UJK	510 UJK	3900 UJK	2700 UJK	370 UJK	14000 UJK	1300 UJK	1900 UJK	3500 UJK
Hexachloroethane	SVOA	240 UJK	1400 UJK	1000 UJK	350 UJK	250 UJK	260 UJK	2000 UJK	1400 UJK	190 UJK	7400 UJK	690 UJK	1000 UJK	1800 UJK
Indeno(1,2,3-cd)pyrene	SVOA	1.3 JK	28 JK	27 JK	350	550	2.9 JK	54 JK	40 JK	11 JK	55 JK	4.3 JQ	13 JK	100 JK
Isophorone	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Naphthalene	SVOA	4.7 U	27 U	20 U	6.8 U	12	5.1 U	39 U	27 U	3.7 U	73 JQ	13 U	19 U	35 U
Nitrobenzene	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
N-Nitroso-di-n propylamine	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
N-Nitrosodiphenylamine	SVOA	240 U	1400 U	1000 U	350 U	250 U	260 U	2000 U	1400 U	190 U	7400 U	690 U	1000 U	1800 U
Pentachlorophenol	SVOA	5 JQ	56 U	40 U	41	29	10 U	310	55 U	24	290 U	27 U	39 U	75
Phenanthrene	SVOA	2.9 JQ	74	50	600	1400	1.6 JQ	490	67	16	560 JH	6.2 JQ	27	310
Phenol	SVOA	470 U	2700 U	2000 U	680 U	480 U	510 U	3900 U	2700 U	370 U	14000 U	1300 U	1900 U	3500 U
Pyrene	SVOA	2.6 JQ	190 JK	85 JK	940	2200	3.2 JQ	910 JK	140 JK	29 JK	540 JK	5.4 JQ	36 JK	740 JK
TPH-GC/Diesel Range Organics	TPH-Dx	7.7 U	23 U	17 U	14 U	7.7 U	11 U	36 U	20 U	6.1 U	17 U	25 U	17 U	13 U
TPH-GC/Motor Oil Range Organics	TPH-Dx	25	2200 JK	350	1700	250	130	3400	480	280	36000	120	760	640
TPH-Gx Gasoline Range Organics	TPH-Gx	8.5 U	26 JH	15	48 UJH	5.6 U	7.6 U	72 UJH	6.3 U	4.3 U	5.2 U	52 U	6.3 U	20 UJH
1,1,1-Trichloroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,1,2,2-Tetrachloroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,1,2-Trichloroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,1-Dichloroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,1-Dichloroethene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U		51 U	5.4 U	14 U
1,2,3-Trichlorobenzene	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 UJK
1,2,4-Trichlorobenzene	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 UJK
1,2-Dibromo-3-chloropropane	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 UJK
1,2-Dibromoethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,2-Dichlorobenzene	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 UJK
1,2-Dichloroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,2-Dichloropropane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
1,3-Dichlorobenzene	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 UJK
1,4-Dichlorobenzene	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 UJK
2-Butanone	VOA	17 U	100	0 R	78	20 U	20 U	49	23 U	8.7 U	11	100 U	11 U	68
2-Hexanone	VOA	17 UJK	20 U	10 U	23 U	20 U	20 U	20 U	23 U	8.7 U	11 U	100 U	11 U	28 U
4-Methyl-2-pentanone	VOA	17 UJK	20 U	200	23 U	20 U	20 U	20 U	23 U	8.7 U	11 U	100 U	11 U	28 U
Acetone	VOA	92	230	0 R	250	70	34	170	18 JQ	9.1	32	57 JQ	8.5 JQ	250
Benzene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Bromochloromethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Bromodichloromethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Bromoform	VOA	8.6 UJK	10 UJK	5.1 UJK	11 U	10 U	9.8 UJK	10 UJK	12 UJK	4.3 U	5.3 UJK	51 UJK	5.4 U	14 UJK
Bromomethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U		51 U	5.4 U	14 U
Carbon disulfide	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	25	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Carbon tetrachloride	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Chlorobenzene	VOA	8.6 UJK	10 U	5.1 U	11 U	10 U	9.8 UJK	10 U	12 U	4.3 U	5.3 UJK	51 UJK	5.4 UJK	14 U
Chloroethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U		51 U	5.4 U	14 U
Chloroform	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Chloromethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U		51 U	5.4 U	14 U
cis-1,2-Dichloroethene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
cis-1,3-Dichloropropene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Cyclohexane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Dibromochloromethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Dichlorodifluoromethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U		51 U	5.4 U	14 U
Ethylbenzene	VOA	8.6 U	19	58	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Isopropylbenzene	VOA	8.6 U	6.1 JQ	5.9	11 U	10 U	9.8 U	84	12 U	4.3 U	5.3 U	51 U	5.4 U	5.3 JQ
m, p-Xylene	VOA	8.6 U	150	190	11 U	10 U	9.8 U	7.3 JQ	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U

EPA Sample ID		16084610	16084601	16084602	16084603	16084604	16084605	16084615	16084611	16084616	16084617	16084612	16084613	16084614
Station Location		TD05SS	TA01SS	TA02SS	TA03SS	TA04SS	TA05SS	TD04SS	TB01SS	TB02SS	TB03SS	TD01SS	TD02SS	TD03SS
Organic CLP Sample ID		JHFR9	JHFR0	JHFR1	JHFR2	JHFR3	JHFR4	JHF14	JHF10	JHF15	JHF16	JHF11	JHF12	JHF13
Inorganic CLP Sample ID		MJHFR9	MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4	MJHFR14	MJHFR10	MJHFR15	MJHFR16	MJHFR11	MJHFR12	MJHFR13
Description		Background	Landfill Area						Workshop Area			Bus/RV Area		
Methyl acetate	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Methyl tert-butyl ether	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Methylcyclohexane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Methylene chloride	VOA	8.6 U	10 U	1.3 JQ	11 U	10 U	9.8 U	2.4 JQ	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
o-Xylene	VOA	8.6 U	45	61	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Styrene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	3.6 JQ	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Tetrachloroethene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	26	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Toluene	VOA	3.4 JQ	0 R	0 R	5.2 JQ	10 U	2.9 JQ	8 JQ	2.1 JQ	4.3 U	2.1 JQ	8.9 JQ	2.1 JQ	4.9 JQ
trans-1,2-Dichloroethene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
trans-1,3-Dichloropropene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Trichloroethene	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U	5.3 U	51 U	5.4 U	14 U
Trichlorofluoromethane	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	64	12 U	4.3 U		51 U	5.4 U	14 U
Vinyl chloride	VOA	8.6 U	10 U	5.1 U	11 U	10 U	9.8 U	10 U	12 U	4.3 U		51 U	5.4 U	14 U



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MEMORANDUM

DATE: April 29, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Organic Data Summary Check, May Creek Landfill Site, Renton, Washington**

REF: TDD: 16-02-0007 PAN: 1004530.0004.145.01

The data summary check of 13 soil samples collected from the May Creek Landfill site located in Renton, Washington has been completed. Analyses for extended diesel range total petroleum hydrocarbons were performed following NWTPH-Dx at the Manchester Environmental Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VE/M).

The samples were numbered:

16084601	16084602	16084603	16084604	16084605	16084610
16084611	16084612	16084613	16084614	16084615	16084616
16084617					

No discrepancies were noted. The secondary reviewer added the bias qualifier K (unknown bias) to the applicable estimated result.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

Subject: Data Release for Total Petroleum Hydrocarbon-Diesel Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: May Creek Landfill RA

Project Code: SFP-104A

From: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

To: Jeff Fowlow
Office of Environmental Cleanup, USEPA Region 10

CC: Renee Nordeen
E&E

I have authorized release of this data package. Attached you will find the total petroleum hydrocarbon-diesel range extended (TPH-Dx) analysis results for the May Creek Landfill RA samples. For further information regarding the attached data, contact Dana Walker at 360-871-8704.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM
FOR ORGANIC CHEMICAL ANALYSES

Date: April 18, 2016

To: Jeff Fowlow
Office of Environmental Cleanup, USEPA Region 10

From: Dana Walker, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the Total Petroleum Hydrocarbon-Diesel Range Extended Analysis of Samples from the May Creek Landfill RA

Project Code: SFP-104A
Account Code: 2016T10P303DD210ZZLA00

CC: Renee Nordeen
E&E

The following is a quality assurance review of the data for total petroleum hydrocarbon - diesel range extended (TPH-Dx) analysis of samples from the above referenced site. The analyses were performed by EPA Region 10 ESAT Contractors at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

16084601	16084602	16084603	16084604	16084605	16084610
16084611	16084612	16084613	16084614	16084615	16084616
16084617					

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

For those tests for which the EPA Region 10 Laboratory has been accredited by The NELAC Institute (TNI), all requirements of the current TNI Standard have been met.

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of soil samples is 14 days from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

4. Sample Preparation

Samples were prepared according to the method/SOP. It should be noted that many of the samples were heterogeneous in nature, containing visible non-soil material such as glass, rocks, grass, roots, paper and wood. Sample 16084601 was analyzed in duplicate (as noted in Section 10) and gave a %RSD of 44%, which was likely due to the non-homogeneous nature of the sample.

5. Initial Calibration

Initial calibrations were performed on 2/26/2016 for #2 diesel, motor oil and surrogate. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq 20\%$ or the correlation coefficients met the criteria of ≥ 0.99 .

6. Continuing Calibration Verification (CCV)

The CCV met the criteria for frequency of analysis and relative retention time (RRT) windows for all target and surrogate compounds. The percent accuracies were 80-120% of the true values.

7. Blank Analysis

Method blanks were prepared and analyzed with each sample extraction batch to evaluate the potential for laboratory contamination and effects on the sample results. TPH-Dx was not detected in the blanks.

8. Surrogates

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. All surrogate recoveries for the samples were within the criteria of 50-150%.

9. LCS/LCSD

Data for laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the QAPP criteria of 50-150% with a relative percent difference (RPD) of ≤ 35 .

10. Duplicate Sample Analysis- *Laboratory/QAPP Criteria Not Met*

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. Duplicate analyses were performed using samples 16084601 and 16084605. All results that were above 5 times the reporting limit met the SOP's relative percent difference (RPD) criteria of ≤ 30 except for the following:

Sample 16084601 and its duplicate had an RPD of 44%, as a result the sample was flagged for any detected motor oil range organics.

11. Compound Identification/Quantitation

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

Diesel range organics is a collective term for petroleum products that generally elute before motor oil but after gasoline from the gas chromatograph.

Diesel range organics were not detected above the reporting limit in any of the samples.

Motor oil range organics is a collective term for any petroleum product that chromatographically consists primarily of an unresolved envelope of compounds generally eluting after #2 diesel. Included in the definition are hydraulic fluids, motor oils, lubricating oils, cutting oils, mineral oils, transmission fluids, etc.

Motor oil range organics were detected all samples. The resulting chromatographic fingerprint of the soil samples were similar to the motor oil calibration standard used for calibration. None of the other samples had motor oil range organics detected above the reporting limit.

Chemical Abstract Service (CAS) numbers with a "*" indicates that the number was created at the Region 10 Laboratory due to lack of an existing one.

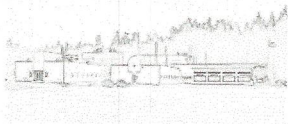
All manual integrations have been reviewed and found to comply with acceptable integration practices.

12. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Dana Walker at the Region 10 Laboratory, phone number (360) 871 – 8704.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. <u>No value is reported with this qualification.</u>
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. <u>No value is reported with this qualification.</u>



US EPA Region 10 Laboratory

Multi-Analyte Final Report



Project Code : SFP-104A

Site : MAY CREEK LANDFILL RA

Contact : Jeff Fowlow

Account : 2016T10P303DD210ZZLA00

Sample : 16084601

Information : TA01SS

Matrix : Soil

Collected : 2/25/2016 12:59:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	23	mg/Kg	U	3/17/16	1
*400010	TPH-GC/Motor Oil Range Organics	2200	mg/Kg	J K	3/17/16	1
Surrogate Compounds:						
629992	Pentacosane	63	%Rec		3/17/16	1

Sample : 16084602

Information : TA02SS

Matrix : Soil

Collected : 2/25/2016 2:13:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	17	mg/Kg	U	3/17/16	1
*400010	TPH-GC/Motor Oil Range Organics	350	mg/Kg		3/17/16	1
Surrogate Compounds:						
629992	Pentacosane	51	%Rec		3/17/16	1

Sample : 16084603

Information : TA03SS

Matrix : Soil

Collected : 2/25/2016 2:57:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	14	mg/Kg	U	3/28/16	1
*400010	TPH-GC/Motor Oil Range Organics	1700	mg/Kg		3/15/16	10
Surrogate Compounds:						
629992	Pentacosane	99	%Rec		3/28/16	1

Sample : 16084604

Information : TA04SS

Matrix : Soil

Collected : 2/25/2016 3:34:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	7.7	mg/Kg	U	3/15/16	1
*400010	TPH-GC/Motor Oil Range Organics	250	mg/Kg		3/15/16	1
Surrogate Compounds:						
629992	Pentacosane	118	%Rec		3/15/16	1

Sample : 16084605

Information : TA05SS

Matrix : Soil

Collected : 2/25/2016 4:09:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	11	mg/Kg	U	3/15/16	1
*400010	TPH-GC/Motor Oil Range Organics	130	mg/Kg		3/15/16	1
Surrogate Compounds:						
629992	Pentacosane	109	%Rec		3/15/16	1

Sample : 16084610

Information : TD05SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 4:47:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	7.7	mg/Kg	U	3/20/16	1
*400010	TPH-GC/Motor Oil Range Organics	25	mg/Kg		3/20/16	1
Surrogate Compounds:						
629992	Pentacosane	110	%Rec		3/20/16	1

Sample : 16084611

Information : TB01SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 2:15:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	20	mg/Kg	U	3/17/16	1
*400010	TPH-GC/Motor Oil Range Organics	480	mg/Kg		3/17/16	1
Surrogate Compounds:						
629992	Pentacosane	59	%Rec		3/17/16	1

Sample : 16084612

Information : TD01SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 2:57:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	25	mg/Kg	U	3/16/16	1
*400010	TPH-GC/Motor Oil Range Organics	120	mg/Kg		3/16/16	1
Surrogate Compounds:						
629992	Pentacosane	125	%Rec		3/16/16	1

Sample : 16084613

Information : TD02SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 3:24:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	17	mg/Kg	U	3/17/16	1
*400010	TPH-GC/Motor Oil Range Organics	760	mg/Kg		3/17/16	1
Surrogate Compounds:						
629992	Pentacosane	54	%Rec		3/17/16	1

Sample : 16084614

Information : TD03SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 3:42:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	13	mg/Kg	U	3/17/16	1
*400010	TPH-GC/Motor Oil Range Organics	640	mg/Kg		3/17/16	1
Surrogate Compounds:						
629992	Pentacosane	120	%Rec		3/17/16	1

Sample : 16084615

Information : TD04SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 4:03:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	36	mg/Kg	U	3/28/16	1
*400010	TPH-GC/Motor Oil Range Organics	3400	mg/Kg		3/28/16	1
Surrogate Compounds:						
629992	Pentacosane	62	%Rec		3/28/16	1

Sample : 16084616

Information : TB02SS

Matrix : Soil

Collected : 2/25/2016 3:55:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	6.1	mg/Kg	U	3/16/16	1
*400010	TPH-GC/Motor Oil Range Organics	280	mg/Kg		3/16/16	1
Surrogate Compounds:						
629992	Pentacosane	99	%Rec		3/16/16	1

Sample : 16084617

Information : TB03SS

Matrix : Soil

Collected : 2/25/2016 4:50:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	17	mg/Kg	U	3/30/16	1
*400010	TPH-GC/Motor Oil Range Organics	36000	mg/Kg		3/31/16	100
Surrogate Compounds:						
629992	Pentacosane	113	%Rec		3/30/16	1

Sample : 16084601 Sample Duplicate

Information : TA01SS

Matrix : Soil

Collected : 2/25/2016 12:59:00PM

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	23	mg/Kg	U	3/28/16	1
*400010	TPH-GC/Motor Oil Range Organics	3600	mg/Kg		3/16/16	10
Surrogate Compounds:						
629992	Pentacosane	66	%Rec		3/28/16	1

Sample : 16084605 Sample Duplicate

Information : TA05SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 4:09:00PM

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	9.7	mg/Kg	U	3/15/16	1
*400010	TPH-GC/Motor Oil Range Organics	130	mg/Kg		3/15/16	1
Surrogate Compounds:						
629992	Pentacosane	115	%Rec		3/15/16	1

Sample : 85S030216ABL Blank

Information : Blank

Matrix : Solid

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*400009	TPH-GC/Diesel Range Organics	8.0	mg/Kg	U	3/16/16	1
*400010	TPH-GC/Motor Oil Range Organics	20	mg/Kg	U	3/16/16	1
Surrogate Compounds:						
629992	Pentacosane	109	%Rec		3/16/16	1

Sample : 85S030216AL1 Lab Control Std

Information : Lab Control Standard

Matrix : Solid

Weight Basis : Dry

Parameter : TPH-Dx

Prep Method: 3535A - Solid Phase Extraction

Analysis Method: NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	106	%Rec		3/15/16	1
Surrogate Compounds:						
629992	Pentacosane	102	%Rec		3/15/16	1

Sample : 85S030216AL2 Lab Control Std#2**Information :** Lab Control Standard Dup.**Matrix :** Solid**Weight Basis :** Dry**Parameter :** TPH-Dx**Prep Method:** 3535A - Solid Phase Extraction**Analysis Method:** NWTPH-Dx - Diesel range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*400009	TPH-GC/Diesel Range Organics	107	%Rec		3/15/16	1
Surrogate Compounds:						
629992	Pentacosane	99	%Rec		3/15/16	1



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Global Environmental Specialists

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Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 27, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Organic Data Summary Check, May Creek Landfill Site, Renton, Washington**

REF: TDD: 16-02-0607 PAN: 1004530.0004.145.01

The data summary check of 9 soil/soil layers collected from the May Creek Landfill site located in Renton, Washington has been completed. Flashpoint analyses were performed following EPA and laboratory guidelines at the Manchester Environmental Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Manual Process (S4VM).

The samples were numbered:

16084619 A (top layer)	16084619 B (bottom layer)	16084621	16084622
16084623 A (top layer)	16084623 B (bottom layer)	16084625	
16084626 A (top layer)	16084626 B (bottom layer)		

The laboratory noted that sample 16084626 appeared to have a separate bottom layer of silty or sludgy material. Due to the dark color, viscosity and opacity of the sample, subsampling of the different layers was difficult to perform and may have been approximate.

No discrepancies were noted.

The following statements include notes from the laboratory:

Para-xylene was analyzed as a reference standard. All reference sample results flashed at a lower temperature than the acceptance criterion in ASTM D-3278-78. The laboratory typically experiences a 1.0°C low bias (see Section 6); however on the day of analysis the low bias was 1.5°C. Therefore, flashpoint results for these samples may actually be 1.5°C higher than reported.

Extensive testing and comparison, utilizing multiple standard sources and instrumentation, under the direction of experienced flashpoint chemists indicate the Region 10 Laboratory results for this analysis may contain a negative bias of 1.0°C. In addition, on this day of analysis the flashpoint reference standard flashed lower than would be expected even with a 1.0°C low bias (see section 4). Flashpoint results for the samples in this project may actually be 1.5°C higher than reported. As none of the samples tested flashed within 1.5°C of the regulatory limit of 60°C, this potential bias should not impact data usability.

Based on these notes, the secondary reviewer did not add any qualifiers but notes that the results are likely 1.5°C low biased.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganics Results from the Region 10
USEPA Laboratory

PROJECT NAME: May Creek Landfill Removal Assessment

PROJECT CODE: SFP-104A

FROM: Gerald Dodo, Supervisory Chemist
USEPA Region 10 Laboratory
Office of Environmental Assessment

TO: Jeffrey Fowlow, On Scene Coordinator
Office of Environmental Cleanup
US EPA Region 10

CC: Renee Nordeen, E&E

I have authorized release of this data package. Attached you will find the Flashpoint results for the May Creek Landfill Removal Assessment project for the samples received on 03/03/2016. For further information regarding the attached data, contact Katie Adams at 360-871-8748.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

**QUALITY ASSURANCE MEMORANDUM
FOR INORGANIC CHEMICAL ANALYSES**

DATE: June 24, 2016

TO: Jeffrey Fowlow, On Scene Coordinator
Office of Environmental Cleanup, Preparedness and Prevention Unit, US EPA Region 10

From: Katie Adams, Chemist
Office of Environmental Review and Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of May Creek Landfill Removal Assessment
For Flashpoint

Project Code: SFP-104A
Account Code: 2016T10P303DD210ZZLA00

CC: Renee Nordeen, E&E

The following is a quality assurance review of the results of the analysis of 9 samples or sample layers for Flashpoint. These samples were submitted for the May Creek Landfill Removal Assessment Project. The analyses were performed by EPA chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

16084619 A (top layer)	16084619 B (bottom layer)	16084621	16084622
16084623 A (top layer)	16084623 B (bottom layer)	16084625	
16084626 A (top layer)	16084626 B (bottom layer)		

Note: Sample 16084626 appeared to have a separate bottom layer of silty or sludgy material. Due to the dark color, viscosity and opacity of the sample, subsampling of the different layers was difficult to perform and may have been approximate.

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "Laboratory/QAPP Criteria Not Met".

For those tests for which the USEPA Region 10 Laboratory has been accredited by The NELAC Institute (TNI), all requirements of the current TNI Standard have been met.

1. Sample Transport and Receipt

Upon sample receipt, all conditions met Laboratory/QAPP requirements for this project for the analyses covered by this memo. These samples were stored in locked storage or in direct possession of the responsible analyst for the entire time they were held at the Region 10 Laboratory.

2. Sample Holding Times

There is no method recommended holding time for flashpoint in liquids.

3. Sample Preparation

Samples were prepared according to the method outlined in the SOP for this analyte in this type of matrix. No qualification of the data was required based on sample preparation.

4. Reference Samples -Laboratory/QAPP Criteria Not Met

Para-xylene was analyzed as a reference standard. All reference sample results flashed at a lower temperature than the acceptance criterion in ASTM D-3278-78. The laboratory typically experiences a 1.0°C low bias (see Section 6); however on the day of analysis the low bias was 1.5°C. Therefore, flashpoint results for these samples may actually be 1.5°C higher than reported.

5. Duplicate Analysis

Duplicate analysis is only performed on samples which flash below the regulatory limit and within the reportable range of the instrument (i.e., between 20°C and 65°C). No samples flashed within this range, so no duplicate analyses were performed. No qualification was required based on duplicate analysis.

6. Interferences

Extensive testing and comparison, utilizing multiple standard sources and instrumentation, under the direction of experienced flashpoint chemists indicate the Region 10 Laboratory results for this analysis may contain a negative bias of 1.0°C. In addition, on this day of analysis the flashpoint reference standard flashed lower than would be expected even with a 1.0°C low bias (see section 4). Flashpoint results for the samples in this project may actually be 1.5°C higher than reported. As none of the samples tested flashed within 1.5°C of the regulatory limit of 60°C, this potential bias should not impact data usability.

7. Reporting Limits

Samples which flashed below ambient temperature were reported as <20°C.
Samples which did not flash at 65.0°C were reported as >65°C.

8. Data Qualifiers

No data qualification was required for these analyses.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Katie Adams at the Region 10 Laboratory, phone number (360) 871-8748.

9. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Precision - the degree of mutual agreement or repeatability among a series of individual results.

Reference materials - Samples with analyte values that are homogeneous and well established. This allows the reference material to be used to assess the accuracy of the measurement method.

US EPA Region 10 Laboratory

Multi-Sample Final Report



Project Code : SFP-104A

Site : MAY CREEK LANDFILL RA

Contact : Jeff Fowlow

Account : 2016T10P303DD210ZZLA00

Parameter(s): Flashpoint

Analyte: *90027 - Flashpoint

Weight Basis : N/A

Prep Method(s): D3278-78 - Flash Point in Liquids by SetaFlash Closed Tester, ASTM

Analytical Method: D3278-78 - Flash Point in Liquids by SetaFlash Closed Tester, ASTM

Target Analyte Results:

Sample	Information	Lab Matrix	Result	Unit	Qual.	Analysis Date
16084619-A sam	TC01PR	Liquid	>65	degC		6/22/16
16084619-B sam	TC01PR	Liquid	>65	degC		6/22/16
16084621 sam	TC03PR	Product	<20	degC		6/22/16
16084622 sam	TC04PR	Product	<20	degC		6/22/16
16084623-A sam	TB02DR	Liquid	>65	degC		6/22/16
16084623-B sam	TB02DR	Liquid	>65	degC		6/22/16
16084625 sam	TB04DR	Product	>65	degC		6/22/16
16084626-A sam	TB01DR	Liquid	>65	degC		6/22/16
16084626-B sam	TB01DR	Liquid	>65	degC		6/22/16

Spiked Compounds:

Sample	Information	Lab Matrix	Result	Unit	Qual.	Analysis Date
IW062216AL1 lcs	Lab Control Standard	Liquid	25.3	degC		6/22/16



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MEMORANDUM

DATE: April 25, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Organic Data Summary Check, May Creek Landfill Site, Renton, Washington**

REF: TDD: 16-02-0007 PAN: 1004530.0004.145.01

The data summary check of 13 soil samples collected from the May Creek Landfill site located in Renton, Washington has been completed. Analyses for Low/Medium Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs & SIM), Pesticides, and Aroclor were performed by Shealy Environmental Services located in West Columbia, South Carolina following EPA CLP SOW SOM02.3. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic Process (S4VE).

The samples were numbered:

JHF10	JHF11	JHF12	JHF13	JHF14
JHF15	JHF16	JHFR0	JHFR1	JHFR2
JHFR3	JHFR4	JHFR9		

No discrepancies were noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Date: April 22, 2016

Reply to:
Attn of: OEA-140

MEMORANDUM

Subject: Data Validation Report for the Organic Analyses of the soil samples collected from the May Creek Landfill PA/SI Site.
Case Number: 46026 SDG: JHFR0

From: Raymond Wu, QA Chemist
Environmental Services Unit
Office of Environmental Assessment (OEA - 140), USEPA Region 10

To: Jeff Fowlow, On -Scene Coordinator
Office of Environmental Clean-up (ECL-116), USEPA Region 10

CC: Renee Nordeen
Ecology & Environment, Inc.

Digitally signed by Wu, Raymond
DN: cn=Wu, Raymond,
email=Wu.Raymond@epa.gov
Date: 2016.04.21 14:50:23 -07'00'

The quality assurance (QA) review of the analytical data generated from the analysis of 13 soil samples collected from the above referenced site has been completed. These samples were analyzed for Low/Medium Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs & SIM), Pesticides, and Aroclors. All samples were analyzed by Shealy Environmental Services located in West Columbia, South Carolina. When multiple analytical runs were conducted (i.e., dilution, reanalysis, SIM, medium level, etc.), the run with reportable results has been indicated by the reviewer.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Specific Sampling Plan (SSSP) for the May Creek Landfill Site, Renton, Washington, dated March 14, 2016, the technical specifications of USEPA CLP SOW for Organic Data Review (SOM02.3), the Contract Laboratory Program's National Functional Guidelines for Organic Data Review (EPA-540-R-014-002) and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005).

Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt, extraction, and analyses is attached along with the reviewed data.

Volatile samples JHF10, JHF11, JHF13, JHF14 and JHF16, JHFR2, JHFR4 and JHFR9 were reanalyzed due to low and out of range internal standards. The reanalyses had similar amount of failures to the initial analyses. All volatile results for these samples were reported from the original analyses with exception of JHF16. Some runs (namely JHFR0 & JHFR1) had analyte hits above the linear range. The results were reported from the medium level runs.

All samples were reanalyzed for the semivolatile (SVOC) analyses due to failed closing standard. However, the closing standard failed again. The original SVOC results were reported along with the SIM analyses.

Samples JHF13, JHF14, JHF16, JHFR2 and JHFR3 were analyzed for SIM, either as a rerun or a dilution, due to either failed internal standards or exceedance of the linear range. SIM or SIM dilution runs were picked in combination with the straight SVOC runs at the discretion of the reviewer. In addition, The 3 analytes (Pyrene, Benzo(a)anthracene & Chrysene), quantitated against Internal Standard Chrysene-d₁₂, were qualified due to questionable integration between 13.8 minute to 15.4 minute for all SIM runs which had positive hits.

Pesticide samples JHFR0, JHF10, JHF12 and JHF16 were reanalyzed due to failed closing standard. Because the closing standard failed again, all pesticide results were reported from the original analyses.

I. QUALITY CONTROL RESULTS SUMMARY

The following table summarizes the major quality control (QC) tests as well as the criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP or Region specific and different from the NFG.

Soil Volatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.600 _± and Max. %RSD: 20% to 40% _±
Continuing Calibration Verification	N	Min. RRF: 0.010 to 0.600 _± and Max. Opening %D: 20% to 40% _± Max. Closing %D: 25% to 50% _±
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	Y*	50 – 200% of internal standard area
Soil Semivolatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.500 _± and Max. %RSD: 20% to 40% _±
Continuing Calibration Verification	Y*	Min. RRF: 0.010 to 0.900 _± and

		Max. Opening %D: 20% to 50%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	Y*	50 – 200% of 12 hour standard
Soil Semivolatile/SIM Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration Verification	N	Min. RRF: 0.010 to 0.900‡ and Max. %RSD: 20% to 40%‡
Continuing Calibration Verification	Y*	Min. RRF: 0.010 to 0.900‡ and Max. Opening %D: 20% to 50%‡ Max. Closing %D: 25% to 50%‡
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	Y#	50 – 200% of 12 hour standard
Soil Pesticide Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank
Instrument Performance Checks	Y*	Resolution Check: ≥ 60% PEM/INDA/INDB: ≥ 90% INDC: ≥ 80% (primary), ≥ 50% (secondary) %Breakdown: ≤ 20% (single), ≤ 30% surrogates
Initial Calibration	N	≤ 20% RSD single component analyte ≤ 25% RSD α-BHC & δ-BHC ≤ 30% RSD toxaphene & surrogates
Continuing Calibration Verification	Y	≤ 25% D
Surrogate Spikes	Y*	30 – 150%
Laboratory Control Samples	N	Varies by Compound
Target Compound Identification	Y*	< 30 % D
Soil Aroclor Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank
Initial Calibration	N	< 20% RSD
Continuing Calibration Verification	N	Open: ≤ 25%D, Close: ≤ 50%D
Surrogate Spikes	N	30% - 150%
Laboratory Control Samples	N	50 – 150%
Target Compound Identification	Y*	≤ 25%

*See the Data Qualifications section below for outliers and qualification of affected data.

†10X Blank for ketones, solvents, or common laboratory contaminants.

‡Varies by compound. See Organic CLP NFG Tables 16(VOC) & 30(SVOC/SIM) for individual compound acceptance criteria.

#The 3 analytes (Pyrene, Benzo(a)anthracene & Chrysene), quantitated against Internal Standard Chrysene-d₁₂, were qualified due to questionable integration between 13.8 minute to 15.4 minute for all SIM runs.
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference)

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Data qualifications applied after the manual and electronic data review can be found in the attached "Manual/Electronic Data Review" section of this report.

Control Required Quantitation Limits: Sample data with values reported below the CRQL are qualified JQ.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample
	JN	There is evidence the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the sample result(s) manually in addition to the above data qualifiers to allow for data analysis and interpretation using PREscore software for the National Priorities Listing Hazard Ranking System (NPL-HRS).

Bias Qualifiers	
L	Low Bias
H	High Bias
K	Unknown Bias
Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs)

Attachments:

Manual/Electronic Data Review Results

Sample Summary Report

Data Validation Report - Analytical Sample Listing

Manual/Electronic Data Review Results

Soil Volatile Organic Analysis	
Internal Standard Qualification Summary	
The following samples have area counts below 50% of the of the lower QC criteria. Non-detected compounds associated with the DMC are qualified UJ.	
JHF10, JHF11, JHF12, JHF13, JHF14, JHF16, JHFR0, JHFR1, JHFR4, JHFR9 – Bromoform, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-Chloropropane, 1,2,4-TriChlorobenzene, 1,2,3-Trichlorobenzene	
Surrogate Qualification Summary	
The following samples have concentrations above or below the quantitation limit. Detected compounds are qualified J. Non-detected compounds are qualified UJ.	
Chlorobenzene – JHF11, JHF12, JHF16, JHFR4, JHFR9	
4-Methyl-2-Pentanone, 2-Hexanone – JHFR9	
Toluene – JHFR0ME	
Detection Limit Qualification Summary	
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.	
Acetone – JHF10, JHF11, JHF12	
Toluene – JHF10, JHF11, JHF12, JHF13, JHF14, JHF16, JHFR2, JHFR4, JHFR9	
Isopropylbenzene – JHF13, JHFR0	
Methylene Chloride – JHF14, JHFR1	
m,p-Xylene – JHF14	
Styrene – JHF14	

Manual/Electronic Data Review Results

Soil Semivolatile/SIM Organic Analysis
Spectra Qualification Summary
The analytes, quantitated against Internal Standard Chrysene-d ₁₂ , were qualified, due to questionable integration between 13.8 minute & 15.4 minute, for all SIM runs, except samples JHF11, JHFR4 & JHFR9. Detected compounds are qualified J. Non-detected compounds are qualified UJ. Some are qualified R due to better results reported from either the straight SVOC or the dilution runs.
Pyrene – JHF10, JHF12, JHF13, JHF13DL, JHF14, JHF14DL, JHF15, JHF16, JHFR0, JHFR1. Benzo(a)anthracene - JHF10, JHF12, JHF13, JHF13DL, JHF14, JHF14DL, JHF15, JHFR0, JHFR1. Chrysene - JHF10, JHF12, JHF13, JHF13DL, JHF14, JHF14DL, JHF15, JHF16, JHFR0, JHFR1.
Continuing Calibration Qualification Summary
The following samples are associated with an opening or closing CCV with % Difference exceeding criteria. Detecteds are qualified as estimated J. Nondetects are qualified as estimated UJ.
Indeno(1,2,3-cd)pyrene – JHF10, JHF12, JHF13, JHF14, JHF15, JHF16, JHFR0, JHFR1, JHFR4, JHFR9 Benzo(g,h,i)perylene - JHF10, JHF12, JHF13, JHF14, JHF15, JHF16, JHFR0, JHFR1, JHFR4, JHFR9
Surrogate Qualification Summary
The following samples have DMC recoveries above the upper limit of the criteria window. Detected compounds associated with the DMC are qualified J. Non-detected compounds associated with the DMC are not qualified.
2-Methylnaphthene – JHF16 Phenanthrene – JHF16
Detection Limit Qualification Summary
The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated JQ.
Naphthalene - JHF16 2-Methylnaphthalene – JHFR2 Acenaphthylene - JHFR1, JHF13, JHF12, JHF10, JHFR4, JHFR0 Acenaphthene - JHF12, JHF15, JHF10, JHFR0, JHFR1 Pentachlorophenol – JHFR9 Phenanthrene - JHFR9, JHF11, JHFR4 Anthracene - JHFR0, JHF12, JHFR1, JHF16, JHFR4, JHFR9 Fluoranthene - JHF11, JHFR9, JHFR4 Pyrene - JHFR4, JHFR9, JHF11

Benzo(a)anthracene – JHFR4, JHFR9
Chrysene – JHFR4, JHFR9
Benzo(b)fluoranthene – JHF11, JHFR9
Benzo(k)fluoranthene – JHF12, JHFR4, JHFR9
Benzo(a)pyrene – JHF16, JHFR9, JHFR4
Indeno(1,2,3-cd)pyrene - JHFR9, JHF11
Benzo(g,h,i)perylene – JHF11

Soil Semivolatile Organic Analysis	
Internal Standard Qualification Summary	
The following samples have internal standard area response smaller than or equal to expanded minimum criteria. Detects are qualified as estimated J. Non-detects are qualified as UJ.	
Di-n-octylphthalate – JHF11, JHF12, JHF13, JHF14, JHF15, JHF16, JHFR0, JHFR1, JHFR2, JHFR3	
Butylbenzylphthalate – JHF14, JHFR0	
3,3'-Dichlorobenzidine – JHF14, JHFR0	
Benzo(b)fluoranthene – JHFR2, JHFR3	
Benzo(k)fluoranthene – JHFR2	
Benzo(a)pyrene – JHFR2, JHFR3	
Continuing Calibration Qualification Summary	
The following samples are associated with an opening or closing CCV with % Difference exceeding criteria. Detecteds are qualified as estimated J. Nondetects are qualified as estimated UJ.	
Hexachloroethane – JHF10, JHF11, JHF12, JHF13, JHF14, JHF15, JHF16, JHFR0, JHFR1, JHFR2, JHFR3, JHFR4, JHFR9	
Hexachlorocyclopentadiene – JHF10, JHF11, JHF12, JHF13, JHF14, JHF15, JHF16, JHFR0, JHFR1, JHFR2, JHFR3, JHFR4, JHFR9	
3,3'-Dichlorobenzidine – JHF10, JHF11, JHF12, JHF13, JHF15, JHF16, JHFR1, JHFR2, JHFR3, JHFR4, JHFR9	
Surrogate Qualification Summary	
The following samples have DMC recoveries above the upper limit of the criteria window. Detected compounds associated with the DMC are qualified J. Non-detected compounds associated with the DMC are qualified UJ.	
4-Chloroaniline – JHF10, JHF12, JHF14, JHF16, JHFR0	
1,4-Dioxane – JHF10, JHF11, JHF12, JHF13, JHF14, JHF15, JHF16, JHFR0, JHFR1, JHFR2, JHFR3, JHFR4, JHFR9	
4,6-Dinitro-2-methylphenol – JHF16	
Hexachlorobenzene – JHF16	
Atrazine – JHF16	

Detection Limit Qualification Summary
The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated JQ.
Di-n-butyphthalate – JHF10
Bis(2-ethylhexyl)phthalate – JHF10

Soil Pesticide Organic Analysis
Target Compound Identification Qualification Summary
The percent difference for the detected mean concentration of a target compound between the two gas chromatograph columns for the following samples is greater than twenty five percent (>25%) but less than sixty (<60%). Detected compounds are qualified JK (the lower number of the two columns by the contract lab) and are reported at the level of detection. Non-detected compounds are not qualified.
β-BHC – JHF16
Heptachlor – JHF16
4,4'-DDE – JHFR3
4,4'-DDD – JHF16, JHFR0, JHFR2
Endosulfan Sulfate – JHF16, JHFR1
4,4'-DDT – JHF13, JHF14, JHFR4
Cis-Chlordane – JHF14, JHFR0, JHFR3
Trans-Chlordane – JHFR1, JHFR4
The percent difference for the detected mean concentration of a target compound between the two gas chromatograph columns for the following samples is greater than sixty percent (>60%). Detected compounds are qualified U and are reported at the CRQL or at the level of detection. Non-detected compounds are not qualified.
α-BHC – JHF11, JHF14, JHF16
γ-BHC – JHF14, JHFR3
Aldrin – JHF16
Heptachlor epoxide – JHF14, JHFR1
Endosulfan I – JHF13, JHF14, JHFR1
Dieldrin – JHF13, JHF15, JHF16, JHFR3
Endrin – JHF16, JHFR0, JHFR3
Endosulfan II – JHF14, JHFR0
4,4'-DDD – JHF10, JHF12, JHF13, JHF14
Endosulfan Sulfate – JHF13, JHF14, JHFR2
Methoxychlor – JHF10, JHF12, JHF13, JHF14, JHF16, JHFR0, JHFR1, JHFR2, JHFR3
Endrin Ketone – JHF16, JHFR0

Endrin Aldehyde – JHF14, JHFR0, JHFR3
Cis-Chlordane – JHF12, JHF16
Trans-Chlordane – JHF10, JHF12, JHF13, JHF14, JHF15, JHFR0, JHFR2, JHFR3
Detection Limit Qualification Summary
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.
δ-BHC – JHF16
γ-BHC – JHF16
Aldrin – JHF13
Heptachlor Epoxide – JHFR0, JHFR2, JHFR3, JHFR4
Dieldrin – JHFR1, JHFR2, JHFR4
Endosulfan I – JHF16
4,4'-DDE – JHF16, JHFR2, JHFR4
Endrin – JHF14
Endosulfan Sulfate – JHFR3
4,4'-DDT- JHF15, JHFR1, JHFR2
Methoxychlor – JHF15
Endrin Aldehyde – JHF13
Cis-Chlordane – JHF10, JHF15, JHFR1, JHFR2, JHFR4
Detection Limit Qualification Summary
The following samples have analyte concentration above the quantitation limit (CRQL). Detected compounds are qualified JH, JL, or JK due to either out of range surrogate or 4,4'-DDT % breakdown.
Dieldrin – JHF10, JHF14, JHFR0
Endosulfan II – JHF16
4,4'-DDE – JHF10, JHF13, JHF14, JHFR0
4,4'-DDD – JHF16
4,4'-DDT – JHF10, JHF12, JHF15, JHF16, JHFR0
Methoxychlor – JHF15
Endrin Aldehyde – JHF16
Cis-Chlordane – JHF13
Heptachlor Epoxide – JHF16

Soil Aroclor Organic Analysis	
Target Compound Identification Qualification Summary	
The percent difference for the detected mean concentration of a target compound between the two gas chromatograph columns for the following samples is greater than twenty five percent (>25%) but less than sixty (<60%). Detected compounds are qualified J (the lower number of the two columns by the contract lab). Non-detected compounds are not qualified.	
Aroclor 1242 – JHF13, JHFR0	
Aroclor 1254 – JHF14	
Aroclor 1260 – JHF12, JHF13, JHFR0, JHFR1, JHFR9	
The percent difference for the detected mean concentration of a target compound between the two gas chromatograph columns for the following samples is greater than sixty percent (>60%). Detected compounds are qualified U and are reported at the CRQL or at the level of detection. Non-detected compounds are not qualified.	
Aroclor 1242 – JHF14, JHF16,	
Aroclor 1254 – JHF13, JHFR0, JHFR1, JHFR2, JHFR3, JHFR4, JHFR9	
Aroclor 1260 – JHF10, JHF14, JHF15, JHFR2, JHFR3	
Detection Limit Qualification Summary	
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.	
Aroclor 1254 – JHF10, JHF12, JHF15, JHFR0	
Aroclor 1260 – JHFR4	

Sample Summary Report

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: ABLK91	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1221	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1232	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1242	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1248	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1254	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1260	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1262	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1268	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: ALCS91	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	31	J	ug/kg	31	J	1.0	Yes	S4VEM
Aroclor-1221	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1232	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1242	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1248	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1254	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1260	Spike	35		ug/kg	35		1.0	Yes	S4VEM
Aroclor-1262	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM
Aroclor-1268	Target	33	U	ug/kg	33	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF10	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 59.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
beta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
delta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Heptachlor	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Aldrin	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Endosulfan I	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Dieldrin	Target	7.6	JK	ug/kg	7.6		1.0	Yes	S4VEM
4,4'-DDE	Target	2.5	JK	ug/kg	2.5	J	1.0	Yes	S4VEM
Endrin	Target	5.5	U	ug/kg	5.5	U	1.0	Yes	S4VEM
Endosulfan II	Target	5.5	U	ug/kg	5.5	U	1.0	Yes	S4VEM
4,4'-DDD	Target	5.5	U	ug/kg	1.0	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	5.5	U	ug/kg	5.5	U	1.0	Yes	S4VEM
4,4'-DDT	Target	7.6	JK	ug/kg	7.6		1.0	Yes	S4VEM
Methoxychlor	Target	28	U	ug/kg	3.5	JP	1.0	Yes	S4VEM
Endrin ketone	Target	5.5	U	ug/kg	5.5	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	5.5	U	ug/kg	5.5	U	1.0	Yes	S4VEM
cis-Chlordane	Target	2.1	JQ	ug/kg	2.1	J	1.0	Yes	S4VEM
trans-Chlordane	Target	2.8	U	ug/kg	1.2	JP	1.0	Yes	S4VEM
Toxaphene	Target	280	U	ug/kg	280	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF10	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 59.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Acenaphthylene	Target	15	JQ	ug/kg	15	J	5.0	Yes	S4VEM
Acenaphthene	Target	6.1	JQ	ug/kg	6.1	J	5.0	Yes	S4VEM
Fluorene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	55	U	ug/kg	55	U	5.0	Yes	S4VEM
Phenanthrene	Target	67		ug/kg	67		5.0	Yes	S4VEM
Anthracene	Target	31		ug/kg	31		5.0	Yes	S4VEM
Fluoranthene	Target	110		ug/kg	110		5.0	Yes	S4VEM
Pyrene	Target	140	JK	ug/kg	140		5.0	Yes	S4VEM
Benzo(a)anthracene	Target	95	JK	ug/kg	95		5.0	Yes	S4VEM
Chrysene	Target	150	JK	ug/kg	150		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	170		ug/kg	170		5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	53		ug/kg	53		5.0	Yes	S4VEM
Benzo(a)pyrene	Target	110		ug/kg	110		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	40	JK	ug/kg	40		5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	54	JK	ug/kg	54		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF10	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 59.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM
Aroclor-1221	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM
Aroclor-1232	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM
Aroclor-1242	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM
Aroclor-1248	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM
Aroclor-1254	Target	28	JQ	ug/kg	28	J	1.0	Yes	S4VEM
Aroclor-1260	Target	54	U	ug/kg	11	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM
Aroclor-1268	Target	54	U	ug/kg	54	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHF10	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 59.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Chloromethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Vinyl chloride	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Bromomethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Chloroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Acetone	Target	18	JQ	ug/kg	18	J	1.0	Yes	S4VEM
Carbon disulfide	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Methyl acetate	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Methylene chloride	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
2-Butanone	Target	23	U	ug/kg	23	U	1.0	Yes	S4VEM
Bromochloromethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Chloroform	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Cyclohexane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Benzene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Trichloroethene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	23	U	ug/kg	23	U	1.0	Yes	S4VEM
Toluene	Target	2.1	JQ	ug/kg	2.1	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
2-Hexanone	Target	23	U	ug/kg	23	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Chlorobenzene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Ethylbenzene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
o-Xylene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
m, p-Xylene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Styrene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
Bromoform	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	12	U	ug/kg	12	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	12	UJK	ug/kg	12	U	1.0	Yes	S4VEM
Unknown-02	TIC	21	R	ug/kg	21	J	1.0	No	NV
Unknown-01	TIC	66	R	ug/kg	66	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHF10	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 59.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	580	UJK	ug/kg	580	U	5.0	Yes	S4VEM
Benzaldehyde	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Phenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2-Chlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acetophenone	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachloroethane	Target	1400	UJK	ug/kg	1400	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Isophorone	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Naphthalene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
4-Chloroaniline	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Caprolactam	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
3-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acenaphthene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
2,4-Dinitrophenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Nitrophenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Dibenzofuran	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Diethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluorene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Atrazine	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	2700	R	ug/kg	2700	U	5.0	No	S4VEM
Phenanthrene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Anthracene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Carbazole	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	1200	JQ	ug/kg	1200	J	5.0	Yes	S4VEM
Fluoranthene	Target	2700	R	ug/kg	2700	U	5.0	No	S4VEM
Pyrene	Target	170	R	ug/kg	170	J	5.0	No	S4VEM
Butylbenzylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Chrysene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	560	JQ	ug/kg	560	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	300	R	ug/kg	300	J	5.0	No	S4VEM
Benzo(k)fluoranthene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Benzo(a)pyrene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Unknown-03	TIC	630	R	ug/kg	630	J	5.0	No	NV
Unknown-09	TIC	980	R	ug/kg	980	J	5.0	No	NV
Unknown-12	TIC	1400	R	ug/kg	1400	J	5.0	No	NV
Unknown-13	TIC	990	R	ug/kg	990	J	5.0	No	NV
Unknown Alkane-01	TIC	1500	R	ug/kg	1500	J	5.0	No	NV
cis-Vaccenic acid	TIC	1600	R	ug/kg	1600	NJ	5.0	No	NV
Unknown-08	TIC	1600	R	ug/kg	1600	J	5.0	No	NV
Cholestane	TIC	2500	R	ug/kg	2500	NJ	5.0	No	NV
Unknown Alkane-02	TIC	4700	R	ug/kg	4700	J	5.0	No	NV
Heptadecane	TIC	1300	R	ug/kg	1300	NJ	5.0	No	NV
Unknown-17	TIC	950	R	ug/kg	950	J	5.0	No	NV
Unknown-01	TIC	770	R	ug/kg	770	J	5.0	No	NV
Unknown-07	TIC	2500	R	ug/kg	2500	J	5.0	No	NV
Unknown Alkane-03	TIC	1100	R	ug/kg	1100	J	5.0	No	NV
Unknown-14	TIC	3300	R	ug/kg	3300	J	5.0	No	NV
Unknown-15	TIC	2200	R	ug/kg	2200	J	5.0	No	NV
Unknown-05	TIC	1400	R	ug/kg	1400	J	5.0	No	NV
n-Hexadecanoic acid	TIC	750	R	ug/kg	750	NJ	5.0	No	NV
Unknown-10	TIC	1300	R	ug/kg	1300	J	5.0	No	NV
Unknown-06	TIC	1300	R	ug/kg	1300	J	5.0	No	NV
Unknown-02	TIC	650	R	ug/kg	650	J	5.0	No	NV
Unknown-11	TIC	2100	R	ug/kg	2100	J	5.0	No	NV
Unknown-04	TIC	2700	R	ug/kg	2700	J	5.0	No	NV
Unknown-16	TIC	1900	R	ug/kg	1900	J	5.0	No	NV
9-Octadecenoic acid, (E)-	TIC	2700	R	ug/kg	2700	NJ	5.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF11	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TD01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 24.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	6.9	U	ug/kg	0.58	JP	1.0	Yes	S4VEM
beta-BHC	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
delta-BHC	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
Heptachlor	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
Aldrin	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
Endosulfan I	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
Dieldrin	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
4,4'-DDE	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Endrin	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Endosulfan II	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
4,4'-DDD	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
4,4'-DDT	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Methoxychlor	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM
Endrin ketone	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
cis-Chlordane	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
trans-Chlordane	Target	6.9	U	ug/kg	6.9	U	1.0	Yes	S4VEM
Toxaphene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF11	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TD01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 24.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Chloromethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Vinyl chloride	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Bromomethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Chloroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Acetone	Target	57	JQ	ug/kg	57	J	1.0	Yes	S4VEM
Carbon disulfide	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Methyl acetate	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Methylene chloride	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
2-Butanone	Target	100	U	ug/kg	100	U	1.0	Yes	S4VEM
Bromochloromethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Chloroform	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Cyclohexane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Benzene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Trichloroethene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	100	U	ug/kg	100	U	1.0	Yes	S4VEM
Toluene	Target	8.9	JQ	ug/kg	8.9	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
2-Hexanone	Target	100	U	ug/kg	100	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Chlorobenzene	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
Ethylbenzene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
o-Xylene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
m, p-Xylene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Styrene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
Bromoform	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	51	U	ug/kg	51	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	51	UJK	ug/kg	51	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF11	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TD01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 24.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1221	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1232	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1242	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1248	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1254	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1260	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1262	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM
Aroclor-1268	Target	140	U	ug/kg	140	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF11	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TD01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 24.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Acenaphthylene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Acenaphthene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Fluorene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	27	U	ug/kg	27	U	1.0	Yes	S4VEM
Phenanthrene	Target	6.2	JQ	ug/kg	6.2	J	1.0	Yes	S4VEM
Anthracene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Fluoranthene	Target	10	JQ	ug/kg	10	J	1.0	Yes	S4VEM
Pyrene	Target	5.4	JQ	ug/kg	5.4	J	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Chrysene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	1.9	JQ	ug/kg	1.9	J	1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Benzo(a)pyrene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	4.3	JQ	ug/kg	4.3	J	1.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	13	U	ug/kg	13	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	13	JQ	ug/kg	13	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF11	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TD01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 24.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	290	UJK	ug/kg	290	U	1.0	Yes	S4VEM
Benzaldehyde	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Phenol	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2-Methylphenol	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Acetophenone	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
4-Methylphenol	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Hexachloroethane	Target	690	UJK	ug/kg	690	U	1.0	Yes	S4VEM
Nitrobenzene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Isophorone	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Naphthalene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
4-Chloroaniline	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Caprolactam	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	1300	UJK	ug/kg	1300	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
3-Nitroaniline	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Acenaphthene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
2,4-Dinitrophenol	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Dibenzofuran	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Diethylphthalate	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Fluorene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Atrazine	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	1300	R	ug/kg	1300	U	1.0	No	S4VEM
Phenanthrene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Anthracene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Carbazole	Target	1300	U	ug/kg	1300	U	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Fluoranthene	Target	1300	R	ug/kg	1300	U	1.0	No	S4VEM
Pyrene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Butylbenzylphthalate	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	1300	UJK	ug/kg	1300	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Chrysene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
Di-n-octylphthalate	Target	1300	UJK	ug/kg	1300	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Benzo(k)fluoranthene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Benzo(a)pyrene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	690	R	ug/kg	690	U	1.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	690	U	ug/kg	690	U	1.0	Yes	S4VEM
A'-Neogammacer-22(29)-ene	TIC	7900	R	ug/kg	7900	NJ	1.0	No	NV
.beta.-iso-Methyl ionone	TIC	13000	R	ug/kg	13000	NJ	1.0	No	NV
n-Hexadecanoic acid	TIC	1500	R	ug/kg	1500	NJ	1.0	No	NV
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	TIC	1900	R	ug/kg	1900	NJ	1.0	No	NV
Unknown-04	TIC	4600	R	ug/kg	4600	J	1.0	No	NV
Dronabinol	TIC	6100	R	ug/kg	6100	NJ	1.0	No	NV
Oleic Acid	TIC	6500	R	ug/kg	6500	NJ	1.0	No	NV
1-Heneicosanol	TIC	1100	R	ug/kg	1100	NJ	1.0	No	NV
Unknown-01	TIC	490	R	ug/kg	490	J	1.0	No	NV
Olean-12-ene	TIC	3000	R	ug/kg	3000	NJ	1.0	No	NV
5.beta.-Pregn-11-ene	TIC	2400	R	ug/kg	2400	NJ	1.0	No	NV
Octadecanoic acid	TIC	910	R	ug/kg	910	NJ	1.0	No	NV
Unknown-08	TIC	16000	R	ug/kg	16000	J	1.0	No	NV
Unknown-11	TIC	3800	R	ug/kg	3800	J	1.0	No	NV
Unknown-05	TIC	10000	R	ug/kg	10000	J	1.0	No	NV
Unknown-02	TIC	2200	R	ug/kg	2200	J	1.0	No	NV
Methyl dehydroabietate	TIC	830	R	ug/kg	830	NJ	1.0	No	NV
4,4,6a,6b,8a,11,12,14b-Octamethyl-1,4,4a	TIC	2100	R	ug/kg	2100	NJ	1.0	No	NV
2-Heptacosanone	TIC	2300	R	ug/kg	2300	NJ	1.0	No	NV
.beta.-Sitosterol	TIC	5400	R	ug/kg	5400	NJ	1.0	No	NV
cis-9-Hexadecenoic acid	TIC	2200	R	ug/kg	2200	NJ	1.0	No	NV
Unknown-03	TIC	18000	R	ug/kg	18000	J	1.0	No	NV
9-Octadecenoic acid, (E)-	TIC	5800	R	ug/kg	5800	NJ	1.0	No	NV
Tetracosanoic acid	TIC	910	R	ug/kg	910	NJ	1.0	No	NV
Lanosta-8,24-dien-3-ol, acetate, (3.beta	TIC	1900	R	ug/kg	1900	NJ	1.0	No	NV
2-Pentacosanone	TIC	520	R	ug/kg	520	NJ	1.0	No	NV
Unknown Alkane-02	TIC	2600	R	ug/kg	2600	J	1.0	No	NV
2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	TIC	7900	R	ug/kg	7900	NJ	1.0	No	NV
Unknown-06	TIC	1100	R	ug/kg	1100	J	1.0	No	NV
.alpha.-Amyrin	TIC	4300	R	ug/kg	4300	NJ	1.0	No	NV
Stigmast-4-en-3-one	TIC	2900	R	ug/kg	2900	NJ	1.0	No	NV
Sulfurous acid, octadecyl 2-propyl ester	TIC	750	R	ug/kg	750	NJ	1.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Docosanoic acid	TIC	4300	R	ug/kg	4300	NJ	1.0	No	NV
Unknown-12	TIC	4000	R	ug/kg	4000	J	1.0	No	NV
Unknown-07	TIC	3400	R	ug/kg	3400	J	1.0	No	NV
1,4-Dimethyl-8-isopropylidenetricyclo[5.	TIC	16000	R	ug/kg	16000	NJ	1.0	No	NV
Unknown Aldol Condensate	TIC	1100	R	ug/kg	1100	AJ	1.0	No	NV
Unknown-10	TIC	12000	R	ug/kg	12000	J	1.0	No	NV
Eicosanoic acid	TIC	1700	R	ug/kg	1700	NJ	1.0	No	NV
Unknown-09	TIC	10000	R	ug/kg	10000	J	1.0	No	NV
Unknown-13	TIC	4300	R	ug/kg	4300	J	1.0	No	NV
Unknown Alkane-01	TIC	1400	R	ug/kg	1400	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHF12	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 83.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Chloromethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Bromomethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Chloroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Acetone	Target	8.5	JQ	ug/kg	8.5	J	1.0	Yes	S4VEM
Carbon disulfide	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Methylene chloride	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
2-Butanone	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Bromochloromethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Chloroform	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Benzene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Toluene	Target	2.1	JQ	ug/kg	2.1	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
2-Hexanone	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
Ethylbenzene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
o-Xylene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
m, p-Xylene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Styrene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Bromoform	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.4	UJK	ug/kg	5.4	U	1.0	Yes	S4VEM
Unknown-02	TIC	9.2	R	ug/kg	9.2	J	1.0	No	NV
Unknown-01	TIC	14	R	ug/kg	14	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF12	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 83.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	410	UJK	ug/kg	410	U	5.0	Yes	S4VEM
Benzaldehyde	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Phenol	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
2-Chlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Methylphenol	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Acetophenone	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
4-Methylphenol	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Hexachloroethane	Target	1000	UJK	ug/kg	1000	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Isophorone	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Naphthalene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
4-Chloroaniline	Target	1900	UJK	ug/kg	1900	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Caprolactam	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	1900	UJK	ug/kg	1900	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
3-Nitroaniline	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Acenaphthene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
2,4-Dinitrophenol	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
4-Nitrophenol	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Dibenzofuran	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Diethylphthalate	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Fluorene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Atrazine	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	1900	R	ug/kg	1900	U	5.0	No	S4VEM
Phenanthrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Anthracene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Carbazole	Target	1900	U	ug/kg	1900	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	110	JQ	ug/kg	110	J	5.0	Yes	S4VEM
Fluoranthene	Target	1900	R	ug/kg	1900	U	5.0	No	S4VEM
Pyrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Butylbenzylphthalate	Target	190	JQ	ug/kg	190	J	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	1900	UJK	ug/kg	1900	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Chrysene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	350	JQ	ug/kg	350	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	1900	UJK	ug/kg	1900	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Benzo(k)fluoranthene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Benzo(a)pyrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Unknown-01	TIC	1700	R	ug/kg	1700	J	5.0	No	NV
Unknown-11	TIC	1900	R	ug/kg	1900	J	5.0	No	NV
Unknown-13	TIC	4800	R	ug/kg	4800	J	5.0	No	NV
Unknown-20	TIC	3000	R	ug/kg	3000	J	5.0	No	NV
Unknown-22	TIC	2000	R	ug/kg	2000	J	5.0	No	NV
Unknown-25	TIC	2400	R	ug/kg	2400	J	5.0	No	NV
Unknown-21	TIC	2100	R	ug/kg	2100	J	5.0	No	NV
Unknown-28	TIC	1400	R	ug/kg	1400	J	5.0	No	NV
Unknown-26	TIC	2200	R	ug/kg	2200	J	5.0	No	NV
Unknown-14	TIC	2000	R	ug/kg	2000	J	5.0	No	NV
Unknown-03	TIC	2800	R	ug/kg	2800	J	5.0	No	NV
Unknown-17	TIC	3600	R	ug/kg	3600	J	5.0	No	NV
Unknown-08	TIC	6500	R	ug/kg	6500	J	5.0	No	NV
Unknown-05	TIC	2800	R	ug/kg	2800	J	5.0	No	NV
n-Hexadecanoic acid	TIC	740	R	ug/kg	740	NJ	5.0	No	NV
Unknown-02	TIC	3100	R	ug/kg	3100	J	5.0	No	NV
Unknown-09	TIC	1800	R	ug/kg	1800	J	5.0	No	NV
Unknown-23	TIC	2900	R	ug/kg	2900	J	5.0	No	NV
Unknown-16	TIC	1900	R	ug/kg	1900	J	5.0	No	NV
Unknown-06	TIC	2000	R	ug/kg	2000	J	5.0	No	NV
Unknown-04	TIC	2000	R	ug/kg	2000	J	5.0	No	NV
Unknown-27	TIC	1200	R	ug/kg	1200	J	5.0	No	NV
Unknown Alkane-01	TIC	1800	R	ug/kg	1800	J	5.0	No	NV
Unknown-24	TIC	2200	R	ug/kg	2200	J	5.0	No	NV
Unknown-10	TIC	4000	R	ug/kg	4000	J	5.0	No	NV
Unknown-19	TIC	1500	R	ug/kg	1500	J	5.0	No	NV
Unknown-12	TIC	2000	R	ug/kg	2000	J	5.0	No	NV
Unknown-07	TIC	2100	R	ug/kg	2100	J	5.0	No	NV
Unknown-18	TIC	1500	R	ug/kg	1500	J	5.0	No	NV
3-Bromobenzyl alcohol, trimethylsilyl et	TIC	2600	R	ug/kg	2600	NJ	5.0	No	NV
Unknown-15	TIC	2300	R	ug/kg	2300	J	5.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF12	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 83.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM
Aroclor-1221	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM
Aroclor-1232	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM
Aroclor-1242	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM
Aroclor-1248	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM
Aroclor-1254	Target	21	JQ	ug/kg	21	J	1.0	Yes	S4VEM
Aroclor-1260	Target	19	JK	ug/kg	19	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM
Aroclor-1268	Target	40	U	ug/kg	40	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF12	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 83.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
beta-BHC	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
delta-BHC	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Heptachlor	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Aldrin	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Endosulfan I	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Dieldrin	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
4,4'-DDE	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endrin	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endosulfan II	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
4,4'-DDD	Target	3.9	U	ug/kg	0.46	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
4,4'-DDT	Target	3.1	JK	ug/kg	3.1	J	1.0	Yes	S4VEM
Methoxychlor	Target	20	U	ug/kg	1.3	JP	1.0	Yes	S4VEM
Endrin ketone	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
cis-Chlordane	Target	2.0	U	ug/kg	0.75	JP	1.0	Yes	S4VEM
trans-Chlordane	Target	2.0	U	ug/kg	0.48	JP	1.0	Yes	S4VEM
Toxaphene	Target	200	U	ug/kg	200	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF12	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 83.0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	19	U	ug/kg	19	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	19	U	ug/kg	19	U	5.0	Yes	S4VEM
Acenaphthylene	Target	4.1	JQ	ug/kg	4.1	J	5.0	Yes	S4VEM
Acenaphthene	Target	1.9	JQ	ug/kg	1.9	J	5.0	Yes	S4VEM
Fluorene	Target	19	U	ug/kg	19	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	39	U	ug/kg	39	U	5.0	Yes	S4VEM
Phenanthrene	Target	27		ug/kg	27		5.0	Yes	S4VEM
Anthracene	Target	13	JQ	ug/kg	13	J	5.0	Yes	S4VEM
Fluoranthene	Target	50		ug/kg	50		5.0	Yes	S4VEM
Pyrene	Target	36	JK	ug/kg	36		5.0	Yes	S4VEM
Benzo(a)anthracene	Target	19	JK	ug/kg	19		5.0	Yes	S4VEM
Chrysene	Target	19	JK	ug/kg	19	J	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	42		ug/kg	42		5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	16	JQ	ug/kg	16	J	5.0	Yes	S4VEM
Benzo(a)pyrene	Target	23		ug/kg	23		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	13	JK	ug/kg	13	J	5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	19	U	ug/kg	19	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	29	JK	ug/kg	29		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF13	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TD03SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:42:00
% Moisture :		% Solids : 47.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	35	U	ug/kg	35	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	35	U	ug/kg	35	U	5.0	Yes	S4VEM
Acenaphthylene	Target	14	JQ	ug/kg	14	J	5.0	Yes	S4VEM
Acenaphthene	Target	39		ug/kg	39		5.0	Yes	S4VEM
Fluorene	Target	57		ug/kg	57		5.0	Yes	S4VEM
Pentachlorophenol	Target	75		ug/kg	75		5.0	Yes	S4VEM
Phenanthrene	Target	310		ug/kg	310		5.0	Yes	S4VEM
Anthracene	Target	130		ug/kg	130		5.0	Yes	S4VEM
Fluoranthene	Target	850		ug/kg	850	D	20.0	Yes	S4VEM
Pyrene	Target	740	JK	ug/kg	740	D	20.0	Yes	S4VEM
Benzo(a)anthracene	Target	290	JK	ug/kg	290		5.0	Yes	S4VEM
Chrysene	Target	420	JK	ug/kg	420		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	600		ug/kg	600	D	20.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	200		ug/kg	200		5.0	Yes	S4VEM
Benzo(a)pyrene	Target	310		ug/kg	310		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	100	JK	ug/kg	100		5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	35	U	ug/kg	35	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	110	JK	ug/kg	110		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF13	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TD03SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:42:00
% Moisture :		% Solids : 47.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
beta-BHC	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
delta-BHC	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Heptachlor	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Aldrin	Target	0.94	JQ	ug/kg	0.94	J	1.0	Yes	S4VEM
Heptachlor epoxide	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Endosulfan I	Target	3.5	U	ug/kg	0.44	JP	1.0	Yes	S4VEM
Dieldrin	Target	11	U	ug/kg	11	P	1.0	Yes	S4VEM
4,4'-DDE	Target	14	JK	ug/kg	14		1.0	Yes	S4VEM
Endrin	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
Endosulfan II	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
4,4'-DDD	Target	6.8	U	ug/kg	2.0	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	6.8	U	ug/kg	0.68	JP	1.0	Yes	S4VEM
4,4'-DDT	Target	17	JK	ug/kg	17	P	1.0	Yes	S4VEM
Methoxychlor	Target	35	U	ug/kg	7.2	JP	1.0	Yes	S4VEM
Endrin ketone	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	2.5	JQ	ug/kg	2.5	JP	1.0	Yes	S4VEM
cis-Chlordane	Target	7.3	JK	ug/kg	7.3		1.0	Yes	S4VEM
trans-Chlordane	Target	18	U	ug/kg	18	P	1.0	Yes	S4VEM
Toxaphene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF13	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TD03SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:42:00
% Moisture :		% Solids : 47.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Chloromethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Vinyl chloride	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Bromomethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Chloroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Acetone	Target	250		ug/kg	250		1.0	Yes	S4VEM
Carbon disulfide	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Methyl acetate	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Methylene chloride	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
2-Butanone	Target	68		ug/kg	68		1.0	Yes	S4VEM
Bromochloromethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Chloroform	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Cyclohexane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Benzene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Trichloroethene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	28	U	ug/kg	28	U	1.0	Yes	S4VEM
Toluene	Target	4.9	JQ	ug/kg	4.9	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
2-Hexanone	Target	28	U	ug/kg	28	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Chlorobenzene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Ethylbenzene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
o-Xylene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
m, p-Xylene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Styrene	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
Bromoform	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.3	JQ	ug/kg	5.3	J	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	14	U	ug/kg	14	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	14	UJK	ug/kg	14	U	1.0	Yes	S4VEM
o-Cymene	TIC	73	R	ug/kg	73	NJ	1.0	No	NV
.alpha.-Phellandrene	TIC	71	R	ug/kg	71	NJ	1.0	No	NV
.beta.-Pinene	TIC	28	R	ug/kg	28	NJ	1.0	No	NV
Unknown-01	TIC	39	R	ug/kg	39	J	1.0	No	NV
.gamma.-Terpinene	TIC	71	R	ug/kg	71	NJ	1.0	No	NV
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	TIC	15	R	ug/kg	15	NJ	1.0	No	NV
2-Carene	TIC	220	R	ug/kg	220	NJ	1.0	No	NV
Thujone	TIC	620	R	ug/kg	620	NJ	1.0	No	NV
3-Carene	TIC	17	R	ug/kg	17	NJ	1.0	No	NV
Unknown Alkane-01	TIC	86	R	ug/kg	86	J	1.0	No	NV
Dimethyl sulfide	TIC	20	R	ug/kg	20	NJ	1.0	No	NV
Unknown-03	TIC	22	R	ug/kg	22	J	1.0	No	NV
1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	TIC	51	R	ug/kg	51	NJ	1.0	No	NV
Unknown-10	TIC	30	R	ug/kg	30	J	1.0	No	NV
Unknown-05	TIC	58	R	ug/kg	58	J	1.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Unknown-07	TIC	41	R	ug/kg	41	J	1.0	No	NV
Naphthalene, decahydro-2-methyl-	TIC	75	R	ug/kg	75	NJ	1.0	No	NV
trans-4a-Methyl-decahydronaphthalene	TIC	20	R	ug/kg	20	NJ	1.0	No	NV
D-Limonene	TIC	95	R	ug/kg	95	NJ	1.0	No	NV
Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	TIC	36	R	ug/kg	36	NJ	1.0	No	NV
Cyclohexene, 1-methyl-4-(1-methylethylid	TIC	33	R	ug/kg	33	NJ	1.0	No	NV
Tridecane	TIC	110	R	ug/kg	110	NJ	1.0	No	NV
Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	TIC	640	R	ug/kg	640	NJ	1.0	No	NV
Unknown-08	TIC	31	R	ug/kg	31	J	1.0	No	NV
Unknown-04	TIC	160	R	ug/kg	160	J	1.0	No	NV
.beta.-Myrcene	TIC	51	R	ug/kg	51	NJ	1.0	No	NV
Unknown-02	TIC	31	R	ug/kg	31	J	1.0	No	NV
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	TIC	22	R	ug/kg	22	NJ	1.0	No	NV
Naphthalene, 1,2,3,4-tetrahydro-6-methyl	TIC	21	R	ug/kg	21	NJ	1.0	No	NV
Unknown-06	TIC	19	R	ug/kg	19	J	1.0	No	NV
Unknown-09	TIC	24	R	ug/kg	24	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF13	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TD03SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:42:00
% Moisture :		% Solids : 47.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	730	UJK	ug/kg	730	U	5.0	Yes	S4VEM
Benzaldehyde	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Phenol	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
2-Chlorophenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2-Methylphenol	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Acetophenone	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
4-Methylphenol	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Hexachloroethane	Target	1800	UJK	ug/kg	1800	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Isophorone	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Naphthalene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
4-Chloroaniline	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Caprolactam	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	3500	UJK	ug/kg	3500	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
3-Nitroaniline	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Acenaphthene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
2,4-Dinitrophenol	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
4-Nitrophenol	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Dibenzofuran	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Diethylphthalate	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Fluorene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Atrazine	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	3500	R	ug/kg	3500	U	5.0	No	S4VEM
Phenanthrene	Target	300	R	ug/kg	300	J	5.0	No	S4VEM
Anthracene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
Carbazole	Target	3500	U	ug/kg	3500	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	230	JQ	ug/kg	230	J	5.0	Yes	S4VEM
Fluoranthene	Target	730	R	ug/kg	730	J	5.0	No	S4VEM
Pyrene	Target	770	R	ug/kg	770	J	5.0	No	S4VEM
Butylbenzylphthalate	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	3500	UJK	ug/kg	3500	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	280	R	ug/kg	280	J	5.0	No	S4VEM
Chrysene	Target	380	R	ug/kg	380	J	5.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	1000	JQ	ug/kg	1000	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	3500	UJK	ug/kg	3500	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	790	R	ug/kg	790	J	5.0	No	S4VEM
Benzo(k)fluoranthene	Target	270	R	ug/kg	270	J	5.0	No	S4VEM
Benzo(a)pyrene	Target	330	R	ug/kg	330	J	5.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1800	R	ug/kg	1800	U	5.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1800	U	ug/kg	1800	U	5.0	Yes	S4VEM
Unknown-15	TIC	2600	R	ug/kg	2600	J	5.0	No	NV
Unknown-10	TIC	3100	R	ug/kg	3100	J	5.0	No	NV
11H-Benzo[b]fluorene	TIC	3000	R	ug/kg	3000	NJ	5.0	No	NV
Unknown-05	TIC	14000	R	ug/kg	14000	J	5.0	No	NV
Unknown-08	TIC	3300	R	ug/kg	3300	J	5.0	No	NV
Unknown-06	TIC	3000	R	ug/kg	3000	J	5.0	No	NV
Unknown-13	TIC	2600	R	ug/kg	2600	J	5.0	No	NV
Unknown-12	TIC	3200	R	ug/kg	3200	J	5.0	No	NV
Unknown-17	TIC	5800	R	ug/kg	5800	J	5.0	No	NV
Unknown-16	TIC	2200	R	ug/kg	2200	J	5.0	No	NV
Octadecane, 1-iodo-	TIC	4400	R	ug/kg	4400	NJ	5.0	No	NV
Unknown Alkane-03	TIC	5000	R	ug/kg	5000	J	5.0	No	NV
9-Octadecenoic acid, (E)-	TIC	4300	R	ug/kg	4300	NJ	5.0	No	NV
Squalene	TIC	14000	R	ug/kg	14000	NJ	5.0	No	NV
Unknown-01	TIC	2400	R	ug/kg	2400	J	5.0	No	NV
Unknown-04	TIC	8300	R	ug/kg	8300	J	5.0	No	NV
Unknown Alkane-06	TIC	18000	R	ug/kg	18000	J	5.0	No	NV
Dehydroabietic acid	TIC	3500	R	ug/kg	3500	NJ	5.0	No	NV
Unknown Alkane-04	TIC	4800	R	ug/kg	4800	J	5.0	No	NV
Unknown-11	TIC	3000	R	ug/kg	3000	J	5.0	No	NV
Unknown Alkane-01	TIC	3700	R	ug/kg	3700	J	5.0	No	NV
17-Norkaur-15-ene, 13-methyl-, (8.beta.,	TIC	2200	R	ug/kg	2200	NJ	5.0	No	NV
Unknown Alkane-02	TIC	7600	R	ug/kg	7600	J	5.0	No	NV
Unknown-14	TIC	3500	R	ug/kg	3500	J	5.0	No	NV
Cholestane	TIC	2500	R	ug/kg	2500	NJ	5.0	No	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	TIC	9400	R	ug/kg	9400	NJ	5.0	No	NV
7-Isopropyl-1,1,4a-trimethyl-1,2,3,4,4a,	TIC	2300	R	ug/kg	2300	NJ	5.0	No	NV
Unknown Alkane-05	TIC	3200	R	ug/kg	3200	J	5.0	No	NV
Unknown-07	TIC	3800	R	ug/kg	3800	J	5.0	No	NV
Unknown-02	TIC	2500	R	ug/kg	2500	J	5.0	No	NV
Unknown-03	TIC	3900	R	ug/kg	3900	J	5.0	No	NV
Unknown-09	TIC	2700	R	ug/kg	2700	J	5.0	No	NV
n-Hexadecanoic acid	TIC	5300	R	ug/kg	5300	NJ	5.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	TIC	790	R	ug/kg	790	NJ	5.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF13	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TD03SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:42:00
% Moisture :		% Solids : 47.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM
Aroclor-1221	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM
Aroclor-1232	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM
Aroclor-1242	Target	17	JK	ug/kg	17	JP	1.0	Yes	S4VEM
Aroclor-1248	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM
Aroclor-1254	Target	69	U	ug/kg	23	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	9.3	JK	ug/kg	9.3	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM
Aroclor-1268	Target	69	U	ug/kg	69	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF14	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TD04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids : 42.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	830	UJK	ug/kg	830	U	5.0	Yes	S4VEM
Benzaldehyde	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Phenol	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
2-Chlorophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2-Methylphenol	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Acetophenone	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
4-Methylphenol	Target	500	JQ	ug/kg	500	J	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Hexachloroethane	Target	2000	UJK	ug/kg	2000	U	5.0	Yes	S4VEM
Nitrobenzene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Isophorone	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Naphthalene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
4-Chloroaniline	Target	3900	UJK	ug/kg	3900	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Caprolactam	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	3900	UJK	ug/kg	3900	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
3-Nitroaniline	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Acenaphthene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
2,4-Dinitrophenol	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
4-Nitrophenol	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Dibenzofuran	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Diethylphthalate	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Fluorene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Atrazine	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	3900	R	ug/kg	3900	U	5.0	No	S4VEM
Phenanthrene	Target	410	R	ug/kg	410	J	5.0	No	S4VEM
Anthracene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
Carbazole	Target	3900	U	ug/kg	3900	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	280	JQ	ug/kg	280	J	5.0	Yes	S4VEM
Fluoranthene	Target	750	R	ug/kg	750	J	5.0	No	S4VEM
Pyrene	Target	1200	R	ug/kg	1200	J	5.0	No	S4VEM
Butylbenzylphthalate	Target	2000	UJK	ug/kg	2000	U	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	3900	UJK	ug/kg	3900	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	230	R	ug/kg	230	J	5.0	No	S4VEM
Chrysene	Target	440	R	ug/kg	440	J	5.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	1500	JQ	ug/kg	1500	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	3900	UJK	ug/kg	3900	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	680	R	ug/kg	680	J	5.0	No	S4VEM
Benzo(k)fluoranthene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
Benzo(a)pyrene	Target	240	R	ug/kg	240	J	5.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Unknown Alkane-010	TIC	7100	R	ug/kg	7100	J	5.0	No	NV
Unknown-16	TIC	11000	R	ug/kg	11000	J	5.0	No	NV
Unknown Alkane-04	TIC	21000	R	ug/kg	21000	J	5.0	No	NV
Unknown-03	TIC	5700	R	ug/kg	5700	J	5.0	No	NV
Unknown Alkane-06	TIC	21000	R	ug/kg	21000	J	5.0	No	NV
Unknown Alkane-09	TIC	9500	R	ug/kg	9500	J	5.0	No	NV
Unknown-09	TIC	7200	R	ug/kg	7200	J	5.0	No	NV
Unknown Alkane-07	TIC	13000	R	ug/kg	13000	J	5.0	No	NV
Unknown Alkane-05	TIC	10000	R	ug/kg	10000	J	5.0	No	NV
Benzene, 1,2,3,4-tetramethyl-	TIC	10000	R	ug/kg	10000	NJ	5.0	No	NV
Octadecane, 1-iodo-	TIC	5200	R	ug/kg	5200	NJ	5.0	No	NV
Unknown-10	TIC	10000	R	ug/kg	10000	J	5.0	No	NV
Unknown Alkane-01	TIC	6400	R	ug/kg	6400	J	5.0	No	NV
n-Hexadecanoic acid	TIC	3400	R	ug/kg	3400	NJ	5.0	No	NV
Unknown Alkane-08	TIC	26000	R	ug/kg	26000	J	5.0	No	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	TIC	10000	R	ug/kg	10000	NJ	5.0	No	NV
Unknown-18	TIC	6100	R	ug/kg	6100	J	5.0	No	NV
Unknown-11	TIC	9500	R	ug/kg	9500	J	5.0	No	NV
Unknown-13	TIC	11000	R	ug/kg	11000	J	5.0	No	NV
Unknown-08	TIC	8700	R	ug/kg	8700	J	5.0	No	NV
Unknown-12	TIC	7000	R	ug/kg	7000	J	5.0	No	NV
Unknown-04	TIC	8700	R	ug/kg	8700	J	5.0	No	NV
Unknown-07	TIC	7200	R	ug/kg	7200	J	5.0	No	NV
Unknown-01	TIC	5500	R	ug/kg	5500	J	5.0	No	NV
Unknown-14	TIC	14000	R	ug/kg	14000	J	5.0	No	NV
Unknown Alkane-02	TIC	7300	R	ug/kg	7300	J	5.0	No	NV
2-Bromo dodecane	TIC	11000	R	ug/kg	11000	NJ	5.0	No	NV
Unknown-17	TIC	9200	R	ug/kg	9200	J	5.0	No	NV
Unknown-06	TIC	10000	R	ug/kg	10000	J	5.0	No	NV
Unknown-02	TIC	11000	R	ug/kg	11000	J	5.0	No	NV
Unknown-15	TIC	14000	R	ug/kg	14000	J	5.0	No	NV
1-Chloroeicosane	TIC	18000	R	ug/kg	18000	NJ	5.0	No	NV
Unknown-05	TIC	5800	R	ug/kg	5800	J	5.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Unknown Alkane-03	TIC	10000	R	ug/kg	10000	J	5.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF14	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TD04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids : 42.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	77	U	ug/kg	77	U	1.0	Yes	S4VEM
Aroclor-1221	Target	77	U	ug/kg	77	U	1.0	Yes	S4VEM
Aroclor-1232	Target	77	U	ug/kg	77	U	1.0	Yes	S4VEM
Aroclor-1242	Target	77	U	ug/kg	7.9	JP	1.0	Yes	S4VEM
Aroclor-1248	Target	77	U	ug/kg	77	U	1.0	Yes	S4VEM
Aroclor-1254	Target	39	JK	ug/kg	39	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	77	U	ug/kg	9.0	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	77	U	ug/kg	77	U	1.0	Yes	S4VEM
Aroclor-1268	Target	77	U	ug/kg	77	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF14	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TD04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids : 42.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	39	U	ug/kg	39	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	140		ug/kg	140		5.0	Yes	S4VEM
Acenaphthylene	Target	81		ug/kg	81		5.0	Yes	S4VEM
Acenaphthene	Target	160		ug/kg	160		5.0	Yes	S4VEM
Fluorene	Target	120		ug/kg	120		5.0	Yes	S4VEM
Pentachlorophenol	Target	310		ug/kg	310		5.0	Yes	S4VEM
Phenanthrene	Target	490		ug/kg	490		5.0	Yes	S4VEM
Anthracene	Target	310		ug/kg	310		5.0	Yes	S4VEM
Fluoranthene	Target	1100		ug/kg	1100	D	20.0	Yes	S4VEM
Pyrene	Target	910	JK	ug/kg	910	D	20.0	Yes	S4VEM
Benzo(a)anthracene	Target	310	JK	ug/kg	310		5.0	Yes	S4VEM
Chrysene	Target	510	JK	ug/kg	510		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	500		ug/kg	500		5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	190		ug/kg	190		5.0	Yes	S4VEM
Benzo(a)pyrene	Target	270		ug/kg	270		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	54	JK	ug/kg	54		5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	39	U	ug/kg	39	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	84	JK	ug/kg	84		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF14	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TD04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids : 42.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Vinyl chloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromomethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	64		ug/kg	64		1.0	Yes	S4VEM
1,1-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Acetone	Target	170		ug/kg	170		1.0	Yes	S4VEM
Carbon disulfide	Target	25		ug/kg	25		1.0	Yes	S4VEM
Methyl acetate	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methylene chloride	Target	2.4	JQ	ug/kg	2.4	J	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
2-Butanone	Target	49		ug/kg	49		1.0	Yes	S4VEM
Bromochloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloroform	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Cyclohexane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Benzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Trichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Toluene	Target	8.0	JQ	ug/kg	8.0	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	26		ug/kg	26		1.0	Yes	S4VEM
2-Hexanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Ethylbenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
o-Xylene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
m, p-Xylene	Target	7.3	JQ	ug/kg	7.3	J	1.0	Yes	S4VEM
Styrene	Target	3.6	JQ	ug/kg	3.6	J	1.0	Yes	S4VEM
Bromoform	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	84		ug/kg	84		1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
o-Cymene	TIC	1200	R	ug/kg	1200	NJ	1.0	No	NV
Unknown Alkane-03	TIC	250	R	ug/kg	250	J	1.0	No	NV
Unknown-09	TIC	23	R	ug/kg	23	J	1.0	No	NV
4-Octene, 2,6-dimethyl-, [S-(E)]-	TIC	140	R	ug/kg	140	NJ	1.0	No	NV
Unknown-05	TIC	52	R	ug/kg	52	J	1.0	No	NV
Unknown-03	TIC	160	R	ug/kg	160	J	1.0	No	NV
Unknown Alkane-01	TIC	140	R	ug/kg	140	J	1.0	No	NV
(2E,4E)-3,7-Dimethyl-2,4-octadiene	TIC	28	R	ug/kg	28	NJ	1.0	No	NV
Unknown Alkane-04	TIC	110	R	ug/kg	110	J	1.0	No	NV
Thujone	TIC	480	R	ug/kg	480	NJ	1.0	No	NV
1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	TIC	740	R	ug/kg	740	NJ	1.0	No	NV
Unknown Alkane-02	TIC	91	R	ug/kg	91	J	1.0	No	NV
Unknown-04	TIC	84	R	ug/kg	84	J	1.0	No	NV
Unknown Alkane-06	TIC	170	R	ug/kg	170	J	1.0	No	NV
Disulfide, dimethyl	TIC	190	R	ug/kg	190	NJ	1.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
3-Carene	TIC	470	R	ug/kg	470	NJ	1.0	No	NV
Unknown-06	TIC	24	R	ug/kg	24	J	1.0	No	NV
Unknown-08	TIC	120	R	ug/kg	120	J	1.0	No	NV
Naphthalene	TIC	37	R	ug/kg	37	NJ	1.0	No	NV
D-Limonene	TIC	810	R	ug/kg	810	NJ	1.0	No	NV
Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	TIC	82	R	ug/kg	82	NJ	1.0	No	NV
4-Octene, 2,6-dimethyl-, [S-(Z)]-	TIC	89	R	ug/kg	89	NJ	1.0	No	NV
Unknown-02	TIC	25	R	ug/kg	25	J	1.0	No	NV
Unknown Alkane-05	TIC	100	R	ug/kg	100	J	1.0	No	NV
Dimethyl sulfide	TIC	39	R	ug/kg	39	NJ	1.0	No	NV
Unknown-01	TIC	24	R	ug/kg	24	J	1.0	No	NV
Naphthalene, decahydro-2-methyl-	TIC	100	R	ug/kg	100	NJ	1.0	No	NV
Unknown-07	TIC	52	R	ug/kg	52	J	1.0	No	NV
Cyclohexene, 1-methyl-4-(1-methylethylid	TIC	130	R	ug/kg	130	NJ	1.0	No	NV
.gamma.-Terpinene	TIC	170	R	ug/kg	170	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF14	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TD04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids : 42.2	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	4.0	U	ug/kg	0.61	JP	1.0	Yes	S4VEM
beta-BHC	Target	4.0	U	ug/kg	4.0	U	1.0	Yes	S4VEM
delta-BHC	Target	4.0	U	ug/kg	4.0	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	4.4	U	ug/kg	4.4	P	1.0	Yes	S4VEM
Heptachlor	Target	4.0	U	ug/kg	4.0	U	1.0	Yes	S4VEM
Aldrin	Target	4.0	U	ug/kg	4.0	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	4.1	U	ug/kg	4.1	P	1.0	Yes	S4VEM
Endosulfan I	Target	4.0	U	ug/kg	0.56	JP	1.0	Yes	S4VEM
Dieldrin	Target	16	JK	ug/kg	16	P	1.0	Yes	S4VEM
4,4'-DDE	Target	8.9	JK	ug/kg	8.9		1.0	Yes	S4VEM
Endrin	Target	1.6	JQ	ug/kg	1.6	J	1.0	Yes	S4VEM
Endosulfan II	Target	7.8	U	ug/kg	3.5	JP	1.0	Yes	S4VEM
4,4'-DDD	Target	7.8	U	ug/kg	2.1	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	7.8	U	ug/kg	3.0	JP	1.0	Yes	S4VEM
4,4'-DDT	Target	14	JL	ug/kg	14	P	1.0	Yes	S4VEM
Methoxychlor	Target	40	U	ug/kg	12	JP	1.0	Yes	S4VEM
Endrin ketone	Target	7.8	U	ug/kg	7.8	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	7.8	U	ug/kg	0.87	JP	1.0	Yes	S4VEM
cis-Chlordane	Target	4.4	JL	ug/kg	4.4	P	1.0	Yes	S4VEM
trans-Chlordane	Target	4.6	U	ug/kg	4.6	P	1.0	Yes	S4VEM
Toxaphene	Target	400	U	ug/kg	400	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF15	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
beta-BHC	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
delta-BHC	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
Heptachlor	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
Aldrin	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
Endosulfan I	Target	1.9	U	ug/kg	1.9	U	1.0	Yes	S4VEM
Dieldrin	Target	3.8	U	ug/kg	0.38	JP	1.0	Yes	S4VEM
4,4'-DDE	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
Endrin	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
Endosulfan II	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
4,4'-DDD	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
4,4'-DDT	Target	0.95	JQ	ug/kg	0.95	J	1.0	Yes	S4VEM
Methoxychlor	Target	0.75	JQ	ug/kg	0.75	J	1.0	Yes	S4VEM
Endrin ketone	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	3.8	U	ug/kg	3.8	U	1.0	Yes	S4VEM
cis-Chlordane	Target	0.71	JQ	ug/kg	0.71	J	1.0	Yes	S4VEM
trans-Chlordane	Target	1.9	U	ug/kg	0.49	JP	1.0	Yes	S4VEM
Toxaphene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF15	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Chloromethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Vinyl chloride	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Bromomethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Chloroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Acetone	Target	9.1		ug/kg	9.1		1.0	Yes	S4VEM
Carbon disulfide	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Methyl acetate	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Methylene chloride	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
2-Butanone	Target	8.7	U	ug/kg	8.7	U	1.0	Yes	S4VEM
Bromochloromethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Chloroform	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Cyclohexane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Benzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Trichloroethene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	8.7	U	ug/kg	8.7	U	1.0	Yes	S4VEM
Toluene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
2-Hexanone	Target	8.7	U	ug/kg	8.7	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Chlorobenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Ethylbenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
o-Xylene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
m, p-Xylene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Styrene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Bromoform	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	4.3	U	ug/kg	4.3	U	1.0	Yes	S4VEM
Unknown-01	TIC	5.7	J	ug/kg	5.7	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF15	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	3.7	U	ug/kg	3.7	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	3.7	U	ug/kg	3.7	U	1.0	Yes	S4VEM
Acenaphthylene	Target	4.3		ug/kg	4.3		1.0	Yes	S4VEM
Acenaphthene	Target	0.97	JQ	ug/kg	0.97	J	1.0	Yes	S4VEM
Fluorene	Target	3.7	U	ug/kg	3.7	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	24		ug/kg	24		1.0	Yes	S4VEM
Phenanthrene	Target	16		ug/kg	16		1.0	Yes	S4VEM
Anthracene	Target	8.4		ug/kg	8.4		1.0	Yes	S4VEM
Fluoranthene	Target	30		ug/kg	30		1.0	Yes	S4VEM
Pyrene	Target	29	JK	ug/kg	29		1.0	Yes	S4VEM
Benzo(a)anthracene	Target	18	JK	ug/kg	18		1.0	Yes	S4VEM
Chrysene	Target	25	JK	ug/kg	25		1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	31		ug/kg	31		1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	14		ug/kg	14		1.0	Yes	S4VEM
Benzo(a)pyrene	Target	24		ug/kg	24		1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	11	JK	ug/kg	11		1.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	3.7	U	ug/kg	3.7	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	12	JK	ug/kg	12		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHF15	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	78	UJK	ug/kg	78	U	1.0	Yes	S4VEM
Benzaldehyde	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Phenol	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2-Methylphenol	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Acetophenone	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
4-Methylphenol	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Hexachloroethane	Target	190	UJK	ug/kg	190	U	1.0	Yes	S4VEM
Nitrobenzene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Isophorone	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Naphthalene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
4-Chloroaniline	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Caprolactam	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	370	UJK	ug/kg	370	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
3-Nitroaniline	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Acenaphthene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
2,4-Dinitrophenol	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Dibenzofuran	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Diethylphthalate	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Fluorene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	190	U	ug/kg	190	U	1.0	Yes	S4VEM
Atrazine	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	370	R	ug/kg	370	U	1.0	No	S4VEM
Phenanthrene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
Anthracene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
Carbazole	Target	370	U	ug/kg	370	U	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	82	JQ	ug/kg	82	J	1.0	Yes	S4VEM
Fluoranthene	Target	29	R	ug/kg	29	J	1.0	No	S4VEM
Pyrene	Target	26	R	ug/kg	26	J	1.0	No	S4VEM
Butylbenzylphthalate	Target	120	JQ	ug/kg	120	J	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	370	UJK	ug/kg	370	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
Chrysene	Target	22	R	ug/kg	22	J	1.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	160	JQ	ug/kg	160	J	1.0	Yes	S4VEM
Di-n-octylphthalate	Target	370	UJK	ug/kg	370	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	56	R	ug/kg	56	J	1.0	No	S4VEM
Benzo(k)fluoranthene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
Benzo(a)pyrene	Target	24	R	ug/kg	24	J	1.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	190	R	ug/kg	190	U	1.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	190	U	ug/kg	190	U	1.0	No	S4VEM
Unknown-12	TIC	87	R	ug/kg	87	J	1.0	No	NV
Unknown-17	TIC	500	R	ug/kg	500	J	1.0	No	NV
Unknown-06	TIC	110	R	ug/kg	110	J	1.0	No	NV
Unknown-19	TIC	600	R	ug/kg	600	J	1.0	No	NV
Unknown-07	TIC	100	R	ug/kg	100	J	1.0	No	NV
Unknown-09	TIC	120	R	ug/kg	120	J	1.0	No	NV
Unknown-03	TIC	130	R	ug/kg	130	J	1.0	No	NV
1-Propene, 3-(2-cyclopentenyl)-2-methyl-	TIC	290	R	ug/kg	290	NJ	1.0	No	NV
Unknown Alkane-01	TIC	170	R	ug/kg	170	J	1.0	No	NV
Unknown-05	TIC	140	R	ug/kg	140	J	1.0	No	NV
Unknown-15	TIC	990	R	ug/kg	990	J	1.0	No	NV
Unknown-04	TIC	150	R	ug/kg	150	J	1.0	No	NV
Unknown-11	TIC	91	R	ug/kg	91	J	1.0	No	NV
Unknown-18	TIC	770	R	ug/kg	770	J	1.0	No	NV
Unknown-22	TIC	520	R	ug/kg	520	J	1.0	No	NV
Unknown-16	TIC	330	R	ug/kg	330	J	1.0	No	NV
Unknown-10	TIC	150	R	ug/kg	150	J	1.0	No	NV
Unknown-23	TIC	340	R	ug/kg	340	J	1.0	No	NV
Unknown-02	TIC	340	R	ug/kg	340	J	1.0	No	NV
Unknown-01	TIC	180	R	ug/kg	180	J	1.0	No	NV
Unknown-08	TIC	320	R	ug/kg	320	J	1.0	No	NV
Unknown-13	TIC	1100	R	ug/kg	1100	J	1.0	No	NV
Unknown-21	TIC	300	R	ug/kg	300	J	1.0	No	NV
Unknown-20	TIC	440	R	ug/kg	440	J	1.0	No	NV
Unknown-14	TIC	760	R	ug/kg	760	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF15	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 87.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM
Aroclor-1221	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM
Aroclor-1232	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM
Aroclor-1242	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM
Aroclor-1248	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM
Aroclor-1254	Target	7.4	JQ	ug/kg	7.4	J	1.0	Yes	S4VEM
Aroclor-1260	Target	37	U	ug/kg	5.4	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM
Aroclor-1268	Target	37	U	ug/kg	37	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF16	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids : 90.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	3000	UJK	ug/kg	3000	U	10.0	Yes	S4VEM
Benzaldehyde	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
Phenol	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
2-Chlorophenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2-Methylphenol	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
Acetophenone	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
4-Methylphenol	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Hexachloroethane	Target	7400	UJK	ug/kg	7400	U	10.0	Yes	S4VEM
Nitrobenzene	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Isophorone	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2-Nitrophenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2,4-Dimethylphenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2,4-Dichlorophenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Naphthalene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
4-Chloroaniline	Target	14000	UJK	ug/kg	14000	U	10.0	Yes	S4VEM
Hexachlorobutadiene	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Caprolactam	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2-Methylnaphthalene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	14000	UJK	ug/kg	14000	U	10.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
1,1'-Biphenyl	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2-Chloronaphthalene	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2-Nitroaniline	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Dimethylphthalate	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
3-Nitroaniline	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
Acenaphthene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
2,4-Dinitrophenol	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
4-Nitrophenol	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
Dibenzofuran	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Diethylphthalate	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Fluorene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
4-Nitroaniline	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	14000	UJK	ug/kg	14000	U	10.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Hexachlorobenzene	Target	7400	UJK	ug/kg	7400	U	10.0	Yes	S4VEM
Atrazine	Target	14000	UJK	ug/kg	14000	U	10.0	Yes	S4VEM
Pentachlorophenol	Target	14000	R	ug/kg	14000	U	10.0	No	S4VEM
Phenanthrene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Anthracene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Carbazole	Target	14000	U	ug/kg	14000	U	10.0	Yes	S4VEM
Di-n-butylphthalate	Target	1700	JQ	ug/kg	1700	J	10.0	Yes	S4VEM
Fluoranthene	Target	14000	R	ug/kg	14000	U	10.0	No	S4VEM
Pyrene	Target	1100	R	ug/kg	1100	J	10.0	No	S4VEM
Butylbenzylphthalate	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	14000	UJK	ug/kg	14000	U	10.0	Yes	S4VEM
Benzo(a)anthracene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Chrysene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	17000		ug/kg	17000		10.0	Yes	S4VEM
Di-n-octylphthalate	Target	14000	UJK	ug/kg	14000	U	10.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Benzo(k)fluoranthene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Benzo(a)pyrene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	7400	R	ug/kg	7400	U	10.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	7400	U	ug/kg	7400	U	10.0	Yes	S4VEM
Unknown-01	TIC	90000	R	ug/kg	90000	J	10.0	No	NV
Unknown-10	TIC	9500	R	ug/kg	9500	J	10.0	No	NV
Unknown-15	TIC	8800	R	ug/kg	8800	J	10.0	No	NV
Unknown-19	TIC	10000	R	ug/kg	10000	J	10.0	No	NV
Unknown-23	TIC	12000	R	ug/kg	12000	J	10.0	No	NV
15-Isobutyl-(13.alpha.H)-isocopalane	TIC	27000	R	ug/kg	27000	NJ	10.0	No	NV
Unknown-03	TIC	49000	R	ug/kg	49000	J	10.0	No	NV
Unknown-13	TIC	16000	R	ug/kg	16000	J	10.0	No	NV
Unknown-09	TIC	27000	R	ug/kg	27000	J	10.0	No	NV
Unknown-28	TIC	750000	R	ug/kg	750000	J	10.0	No	NV
Unknown-02	TIC	74000	R	ug/kg	74000	J	10.0	No	NV
Pregnane	TIC	35000	R	ug/kg	35000	NJ	10.0	No	NV
Unknown-16	TIC	14000	R	ug/kg	14000	J	10.0	No	NV
Unknown-22	TIC	11000	R	ug/kg	11000	J	10.0	No	NV
Unknown-26	TIC	9100	R	ug/kg	9100	J	10.0	No	NV
Unknown-06	TIC	17000	R	ug/kg	17000	J	10.0	No	NV
Unknown-07	TIC	9600	R	ug/kg	9600	J	10.0	No	NV
Unknown-05	TIC	12000	R	ug/kg	12000	J	10.0	No	NV
Unknown-17	TIC	13000	R	ug/kg	13000	J	10.0	No	NV
Unknown-11	TIC	33000	R	ug/kg	33000	J	10.0	No	NV
Unknown-12	TIC	9200	R	ug/kg	9200	J	10.0	No	NV
Unknown-14	TIC	18000	R	ug/kg	18000	J	10.0	No	NV
Unknown-08	TIC	14000	R	ug/kg	14000	J	10.0	No	NV
Unknown-21	TIC	15000	R	ug/kg	15000	J	10.0	No	NV
Unknown-20	TIC	17000	R	ug/kg	17000	J	10.0	No	NV
(-)-Isolongifolol, methyl ether	TIC	18000	R	ug/kg	18000	NJ	10.0	No	NV
Unknown-04	TIC	17000	R	ug/kg	17000	J	10.0	No	NV
Unknown-25	TIC	15000	R	ug/kg	15000	J	10.0	No	NV
Unknown-24	TIC	9900	R	ug/kg	9900	J	10.0	No	NV
Unknown-18	TIC	29000	R	ug/kg	29000	J	10.0	No	NV
Unknown-27	TIC	560000	R	ug/kg	560000	J	10.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF16	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids : 90.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	36	U	ug/kg	36	U	1.0	Yes	S4VEM
Aroclor-1221	Target	36	U	ug/kg	36	U	1.0	Yes	S4VEM
Aroclor-1232	Target	36	U	ug/kg	36	U	1.0	Yes	S4VEM
Aroclor-1242	Target	36	U	ug/kg	5.5	JP	1.0	Yes	S4VEM
Aroclor-1248	Target	36	U	ug/kg	36	U	1.0	Yes	S4VEM
Aroclor-1254	Target	60		ug/kg	60		1.0	Yes	S4VEM
Aroclor-1260	Target	100		ug/kg	100		1.0	Yes	S4VEM
Aroclor-1262	Target	36	U	ug/kg	36	U	1.0	Yes	S4VEM
Aroclor-1268	Target	36	U	ug/kg	36	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF16	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids : 90.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	73	JQ	ug/kg	73	J	10.0	Yes	S4VEM
2-Methylnaphthalene	Target	220	JH	ug/kg	220		10.0	Yes	S4VEM
Acenaphthylene	Target	140	U	ug/kg	140	U	10.0	Yes	S4VEM
Acenaphthene	Target	140	U	ug/kg	140	U	10.0	Yes	S4VEM
Fluorene	Target	140	U	ug/kg	140	U	10.0	Yes	S4VEM
Pentachlorophenol	Target	290	U	ug/kg	290	U	10.0	Yes	S4VEM
Phenanthrene	Target	560	JH	ug/kg	560		10.0	Yes	S4VEM
Anthracene	Target	80	JQ	ug/kg	80	J	10.0	Yes	S4VEM
Fluoranthene	Target	200		ug/kg	200		10.0	Yes	S4VEM
Pyrene	Target	540	JK	ug/kg	540		10.0	Yes	S4VEM
Benzo(a)anthracene	Target	140	UJK	ug/kg	140	U	10.0	Yes	S4VEM
Chrysene	Target	240	JK	ug/kg	240		10.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	480		ug/kg	480		10.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	140	U	ug/kg	140	U	10.0	Yes	S4VEM
Benzo(a)pyrene	Target	86	JQ	ug/kg	86	J	10.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	55	JK	ug/kg	55	J	10.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	140	U	ug/kg	140	U	10.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	120	JK	ug/kg	120	J	10.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF16	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids : 90.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Chloromethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Bromomethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Chloroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Acetone	Target	32		ug/kg	32		1.0	Yes	S4VEM
Carbon disulfide	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Methylene chloride	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
2-Butanone	Target	11		ug/kg	11		1.0	Yes	S4VEM
Bromochloromethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Chloroform	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Benzene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Toluene	Target	2.1	JQ	ug/kg	2.1	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
2-Hexanone	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
Ethylbenzene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
o-Xylene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
m, p-Xylene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Styrene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Bromoform	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.3	UJK	ug/kg	5.3	U	1.0	Yes	S4VEM
Unknown-01	TIC	20	R	ug/kg	20	J	1.0	No	NV
Unknown-02	TIC	22	R	ug/kg	22	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHF16	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids : 90.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	1.8	U	ug/kg	0.47	JP	1.0	Yes	S4VEM
beta-BHC	Target	9.5	JK	ug/kg	9.5	P	1.0	Yes	S4VEM
delta-BHC	Target	1.4	JQ	ug/kg	1.4	J	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	0.48	JQ	ug/kg	0.48	J	1.0	Yes	S4VEM
Heptachlor	Target	2.3	JK	ug/kg	2.3	P	1.0	Yes	S4VEM
Aldrin	Target	1.8	U	ug/kg	0.25	JP	1.0	Yes	S4VEM
Heptachlor epoxide	Target	6.3	JK	ug/kg	6.3		1.0	Yes	S4VEM
Endosulfan I	Target	1.5	JQ	ug/kg	1.5	JP	1.0	Yes	S4VEM
Dieldrin	Target	3.6	U	ug/kg	2.9	JP	1.0	Yes	S4VEM
4,4'-DDE	Target	1.8	JQ	ug/kg	1.8	JP	1.0	Yes	S4VEM
Endrin	Target	3.6	U	ug/kg	2.1	JP	1.0	Yes	S4VEM
Endosulfan II	Target	11	JK	ug/kg	11		1.0	Yes	S4VEM
4,4'-DDD	Target	12	JK	ug/kg	12	P	1.0	Yes	S4VEM
Endosulfan sulfate	Target	6.4	JL	ug/kg	6.4	P	1.0	Yes	S4VEM
4,4'-DDT	Target	6.1	JL	ug/kg	6.1	P	1.0	Yes	S4VEM
Methoxychlor	Target	18	U	ug/kg	10	JP	1.0	Yes	S4VEM
Endrin ketone	Target	3.6	U	ug/kg	3.4	JP	1.0	Yes	S4VEM
Endrin aldehyde	Target	4.3	JK	ug/kg	4.3	P	1.0	Yes	S4VEM
cis-Chlordane	Target	1.8	U	ug/kg	0.31	JP	1.0	Yes	S4VEM
trans-Chlordane	Target	1.8	U	ug/kg	1.8	U	1.0	Yes	S4VEM
Toxaphene	Target	180	U	ug/kg	180	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHFR0	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TA01SS	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Vinyl chloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromomethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Acetone	Target	230		ug/kg	230		1.0	Yes	S4VEM
Carbon disulfide	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methyl acetate	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methylene chloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
2-Butanone	Target	100		ug/kg	100		1.0	Yes	S4VEM
Bromochloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloroform	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Cyclohexane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Benzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Trichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Toluene	Target	1100	R	ug/kg	1100	E	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
2-Hexanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Ethylbenzene	Target	19		ug/kg	19		1.0	Yes	S4VEM
o-Xylene	Target	45		ug/kg	45		1.0	Yes	S4VEM
m, p-Xylene	Target	150		ug/kg	150		1.0	Yes	S4VEM
Styrene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromoform	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	6.1	JQ	ug/kg	6.1	J	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	10	UJK	ug/kg	10	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TA01SS	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	580	UJK	ug/kg	580	U	5.0	Yes	S4VEM
Benzaldehyde	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Phenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2-Chlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acetophenone	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Methylphenol	Target	1500	JQ	ug/kg	1500	J	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachloroethane	Target	1400	UJK	ug/kg	1400	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Isophorone	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Naphthalene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
4-Chloroaniline	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Caprolactam	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
3-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acenaphthene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
2,4-Dinitrophenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Nitrophenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Dibenzofuran	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Diethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluorene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Atrazine	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	2700	R	ug/kg	2700	U	5.0	No	S4VEM
Phenanthrene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Anthracene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Carbazole	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluoranthene	Target	2700	R	ug/kg	2700	U	5.0	No	S4VEM
Pyrene	Target	400	R	ug/kg	400	J	5.0	No	S4VEM
Butylbenzylphthalate	Target	1400	JK	ug/kg	1400		5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Chrysene	Target	500	R	ug/kg	500	J	5.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	1000	JQ	ug/kg	1000	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	2700	UJK	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	470	R	ug/kg	470	J	5.0	No	S4VEM
Benzo(k)fluoranthene	Target	620	R	ug/kg	620	J	5.0	No	S4VEM
Benzo(a)pyrene	Target	170	R	ug/kg	170	J	5.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1400	R	ug/kg	1400	U	5.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Unknown-12	TIC	4000	R	ug/kg	4000	J	5.0	No	NV
4-Isothiazolecarboxamide, N-ethyl-3,5-bi	TIC	2600	R	ug/kg	2600	NJ	5.0	No	NV
Unknown-02	TIC	10000	R	ug/kg	10000	J	5.0	No	NV
Unknown-07	TIC	5900	R	ug/kg	5900	J	5.0	No	NV
Unknown-21	TIC	12000	R	ug/kg	12000	J	5.0	No	NV
Unknown-01	TIC	11000	R	ug/kg	11000	J	5.0	No	NV
Unknown-17	TIC	4500	R	ug/kg	4500	J	5.0	No	NV
Unknown-06	TIC	5000	R	ug/kg	5000	J	5.0	No	NV
Unknown-14	TIC	3700	R	ug/kg	3700	J	5.0	No	NV
Unknown-18	TIC	4000	R	ug/kg	4000	J	5.0	No	NV
Unknown-15	TIC	3500	R	ug/kg	3500	J	5.0	No	NV
Unknown-05	TIC	2200	R	ug/kg	2200	J	5.0	No	NV
Unknown Alkane-01	TIC	3700	R	ug/kg	3700	J	5.0	No	NV
Tetrachloro-o-benzoquinone	TIC	3300	R	ug/kg	3300	NJ	5.0	No	NV
Unknown-11	TIC	2500	R	ug/kg	2500	J	5.0	No	NV
Phenanthrene, 2,3,5-trimethyl-	TIC	2400	R	ug/kg	2400	NJ	5.0	No	NV
Unknown-13	TIC	4400	R	ug/kg	4400	J	5.0	No	NV
9-Borabicyclo[3.3.1]nonane, 9-(2-phenyle	TIC	9900	R	ug/kg	9900	NJ	5.0	No	NV
Oleic Acid	TIC	6300	R	ug/kg	6300	NJ	5.0	No	NV
Coprostone	TIC	7800	R	ug/kg	7800	NJ	5.0	No	NV
Unknown-19	TIC	2100	R	ug/kg	2100	J	5.0	No	NV
n-Hexadecanoic acid	TIC	3900	R	ug/kg	3900	NJ	5.0	No	NV
Unknown-10	TIC	2800	R	ug/kg	2800	J	5.0	No	NV
Unknown-03	TIC	2500	R	ug/kg	2500	J	5.0	No	NV
Anthracene, 9-dodecyltetradecahydro-	TIC	5100	R	ug/kg	5100	NJ	5.0	No	NV
Unknown-22	TIC	11000	R	ug/kg	11000	J	5.0	No	NV
9-Octadecenoic acid, (E)-	TIC	14000	R	ug/kg	14000	NJ	5.0	No	NV
3-Bromobenzyl alcohol, trimethylsilyl et	TIC	3600	R	ug/kg	3600	NJ	5.0	No	NV
Unknown-08	TIC	2100	R	ug/kg	2100	J	5.0	No	NV
Unknown-16	TIC	3100	R	ug/kg	3100	J	5.0	No	NV
Unknown-04	TIC	2100	R	ug/kg	2100	J	5.0	No	NV
Unknown-20	TIC	9700	R	ug/kg	9700	J	5.0	No	NV
Unknown-09	TIC	4500	R	ug/kg	4500	J	5.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TA01SS	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1221	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1232	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1242	Target	17	JQ	ug/kg	17	J	1.0	Yes	S4VEM
Aroclor-1248	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1254	Target	55	U	ug/kg	25	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	9.6	JK	ug/kg	9.6	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1268	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TA01SS	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
beta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
delta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Heptachlor	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Aldrin	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	0.60	JQ	ug/kg	0.60	J	1.0	Yes	S4VEM
Endosulfan I	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Dieldrin	Target	6.5	JK	ug/kg	6.5		1.0	Yes	S4VEM
4,4'-DDE	Target	6.2	JK	ug/kg	6.2		1.0	Yes	S4VEM
Endrin	Target	5.4	U	ug/kg	0.67	JP	1.0	Yes	S4VEM
Endosulfan II	Target	5.4	U	ug/kg	2.4	JP	1.0	Yes	S4VEM
4,4'-DDD	Target	4.0	JK	ug/kg	4.0	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
4,4'-DDT	Target	7.6	JK	ug/kg	7.6		1.0	Yes	S4VEM
Methoxychlor	Target	28	U	ug/kg	3.4	JP	1.0	Yes	S4VEM
Endrin ketone	Target	5.4	U	ug/kg	1.2	JP	1.0	Yes	S4VEM
Endrin aldehyde	Target	5.4	U	ug/kg	1.3	JP	1.0	Yes	S4VEM
cis-Chlordane	Target	2.3	JK	ug/kg	2.3	JP	1.0	Yes	S4VEM
trans-Chlordane	Target	2.8	U	ug/kg	1.7	JP	1.0	Yes	S4VEM
Toxaphene	Target	280	U	ug/kg	280	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TA01SS	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Acenaphthylene	Target	6.9	JQ	ug/kg	6.9	J	5.0	Yes	S4VEM
Acenaphthene	Target	4.4	JQ	ug/kg	4.4	J	5.0	Yes	S4VEM
Fluorene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	56	U	ug/kg	56	U	5.0	Yes	S4VEM
Phenanthrene	Target	74		ug/kg	74		5.0	Yes	S4VEM
Anthracene	Target	20	JQ	ug/kg	20	J	5.0	Yes	S4VEM
Fluoranthene	Target	120		ug/kg	120		5.0	Yes	S4VEM
Pyrene	Target	190	JK	ug/kg	190		5.0	Yes	S4VEM
Benzo(a)anthracene	Target	150	JK	ug/kg	150		5.0	Yes	S4VEM
Chrysene	Target	420	JK	ug/kg	420		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	330		ug/kg	330		5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(a)pyrene	Target	130		ug/kg	130		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	28	JK	ug/kg	28		5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	51	JK	ug/kg	51		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0ME	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Chloromethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Vinyl chloride	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Bromomethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Chloroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Trichlorofluoromethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,1-Dichloroethene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Acetone	Target	1200	R	ug/kg	1200	U	1.0	No	S4VEM
Carbon disulfide	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Methyl acetate	Target	910	R	ug/kg	910		1.0	No	S4VEM
Methylene chloride	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
trans-1,2-Dichloroethene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Methyl tert-butyl ether	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,1-Dichloroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
cis-1,2-Dichloroethene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
2-Butanone	Target	1200	R	ug/kg	1200	U	1.0	No	S4VEM
Bromochloromethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Chloroform	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,1,1-Trichloroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Cyclohexane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Carbon tetrachloride	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Benzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2-Dichloroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Trichloroethene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Methylcyclohexane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2-Dichloropropane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Bromodichloromethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
cis-1,3-Dichloropropene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
4-Methyl-2-pentanone	Target	1200	R	ug/kg	1200	U	1.0	No	S4VEM
Toluene	Target	2300	JH	ug/kg	2300		1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,1,2-Trichloroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Tetrachloroethene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
2-Hexanone	Target	1200	R	ug/kg	1200	U	1.0	No	S4VEM
Dibromochloromethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2-Dibromoethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Chlorobenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Ethylbenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
o-Xylene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
m, p-Xylene	Target	490	R	ug/kg	490	J	1.0	No	S4VEM
Styrene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Bromoform	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Isopropylbenzene	Target	120	R	ug/kg	120	J	1.0	No	S4VEM
1,1,2,2-Tetrachloroethane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,3-Dichlorobenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,4-Dichlorobenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2-Dichlorobenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2-Dibromo-3-chloropropane	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2,4-Trichlorobenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
1,2,3-Trichlorobenzene	Target	600	R	ug/kg	600	U	1.0	No	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHFR0MEMS	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Vinyl chloride	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Bromomethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Spike	5600	J+	ug/kg	5600		1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Acetone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Carbon disulfide	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Methyl acetate	Target	920		ug/kg	920		1.0	Yes	S4VEM
Methylene chloride	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
2-Butanone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Bromochloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chloroform	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Cyclohexane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Benzene	Spike	3700		ug/kg	3700		1.0	Yes	S4VEM
1,2-Dichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Trichloroethene	Spike	4800		ug/kg	4800		1.0	Yes	S4VEM
Methylcyclohexane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Toluene	Spike	7400		ug/kg	7400		1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
2-Hexanone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chlorobenzene	Spike	5600		ug/kg	5600		1.0	Yes	S4VEM
Ethylbenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
o-Xylene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
m, p-Xylene	Target	380	J	ug/kg	380	J	1.0	Yes	S4VEM
Styrene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Bromoform	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	64	J	ug/kg	64	J	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MEMSD	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Vinyl chloride	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Bromomethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Spike	4900		ug/kg	4900		1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Acetone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Carbon disulfide	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Methyl acetate	Target	520	J	ug/kg	520	J	1.0	Yes	S4VEM
Methylene chloride	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
2-Butanone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Bromochloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chloroform	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Cyclohexane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Benzene	Spike	4500		ug/kg	4500		1.0	Yes	S4VEM
1,2-Dichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Trichloroethene	Spike	5000		ug/kg	5000		1.0	Yes	S4VEM
Methylcyclohexane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Toluene	Spike	7800		ug/kg	7800		1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
2-Hexanone	Target	1200	U	ug/kg	1200	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Chlorobenzene	Spike	5600		ug/kg	5600		1.0	Yes	S4VEM
Ethylbenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
o-Xylene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
m, p-Xylene	Target	360	J	ug/kg	360	J	1.0	Yes	S4VEM
Styrene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Bromoform	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	580	U	ug/kg	580	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MS	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
beta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
delta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Spike	15	J+	ug/kg	15		1.0	Yes	S4VEM
Heptachlor	Spike	15	J+	ug/kg	15		1.0	Yes	S4VEM
Aldrin	Spike	15	J+	ug/kg	15		1.0	Yes	S4VEM
Heptachlor epoxide	Target	0.49	J+	ug/kg	0.49	J	1.0	Yes	S4VEM
Endosulfan I	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Dieldrin	Spike	38	J+	ug/kg	38		1.0	Yes	S4VEM
4,4'-DDE	Target	6.8	J+	ug/kg	6.8		1.0	Yes	S4VEM
Endrin	Spike	35	J+	ug/kg	35		1.0	Yes	S4VEM
Endosulfan II	Target	3.3	J+	ug/kg	3.3	JP	1.0	Yes	S4VEM
4,4'-DDD	Target	4.1	J+	ug/kg	4.1	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
4,4'-DDT	Spike	46	J+	ug/kg	46		1.0	Yes	S4VEM
Methoxychlor	Target	4.1	J+	ug/kg	4.1	JP	1.0	Yes	S4VEM
Endrin ketone	Target	2.2	J+	ug/kg	2.2	JP	1.0	Yes	S4VEM
Endrin aldehyde	Target	1.8	J+	ug/kg	1.8	J	1.0	Yes	S4VEM
cis-Chlordane	Target	2.2	J+	ug/kg	2.2	J	1.0	Yes	S4VEM
trans-Chlordane	Target	1.0	J+	ug/kg	1.0	JP	1.0	Yes	S4VEM
Toxaphene	Target	280	U	ug/kg	280	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MS	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Chloromethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Vinyl chloride	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Bromomethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Chloroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Spike	100	J+	ug/kg	100		1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Acetone	Target	170		ug/kg	170		1.0	Yes	S4VEM
Carbon disulfide	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Methyl acetate	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Methylene chloride	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
2-Butanone	Target	63		ug/kg	63		1.0	Yes	S4VEM
Bromochloromethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Chloroform	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Cyclohexane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Benzene	Spike	130	J+	ug/kg	130		1.0	Yes	S4VEM
1,2-Dichloroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Trichloroethene	Spike	110		ug/kg	110		1.0	Yes	S4VEM
Methylcyclohexane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	8.3	UJ	ug/kg	8.3	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	17	U	ug/kg	17	U	1.0	Yes	S4VEM
Toluene	Spike	1300		ug/kg	1300	E	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	3.6	J	ug/kg	3.6	J	1.0	Yes	S4VEM
2-Hexanone	Target	17	U	ug/kg	17	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Chlorobenzene	Spike	62		ug/kg	62		1.0	Yes	S4VEM
Ethylbenzene	Target	26		ug/kg	26		1.0	Yes	S4VEM
o-Xylene	Target	60		ug/kg	60		1.0	Yes	S4VEM
m, p-Xylene	Target	190		ug/kg	190		1.0	Yes	S4VEM
Styrene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Bromoform	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	3.9	J	ug/kg	3.9	J	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	8.3	U	ug/kg	8.3	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MS	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Acenaphthylene	Target	6.5	J	ug/kg	6.5	J	5.0	Yes	S4VEM
Acenaphthene	Spike	19	J	ug/kg	19	J	5.0	Yes	S4VEM
Fluorene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Pentachlorophenol	Spike	67		ug/kg	67		5.0	Yes	S4VEM
Phenanthrene	Target	75		ug/kg	75		5.0	Yes	S4VEM
Anthracene	Target	17	J	ug/kg	17	J	5.0	Yes	S4VEM
Fluoranthene	Target	120		ug/kg	120		5.0	Yes	S4VEM
Pyrene	Spike	200		ug/kg	200		5.0	Yes	S4VEM
Benzo(a)anthracene	Target	130		ug/kg	130		5.0	Yes	S4VEM
Chrysene	Target	340		ug/kg	340		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	330		ug/kg	330		5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(a)pyrene	Target	130		ug/kg	130		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	25	J	ug/kg	25	J	5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	51	J	ug/kg	51		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MS	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	140		ug/kg	140		1.0	Yes	S4VEM
Aroclor-1221	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1232	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1242	Target	180		ug/kg	180		1.0	Yes	S4VEM
Aroclor-1248	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1254	Target	81		ug/kg	81		1.0	Yes	S4VEM
Aroclor-1260	Spike	150		ug/kg	150		1.0	Yes	S4VEM
Aroclor-1262	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1268	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MS	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	580	U	ug/kg	580	U	5.0	Yes	S4VEM
Benzaldehyde	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Phenol	Spike	1400	J	ug/kg	1400	J	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2-Chlorophenol	Spike	1200	J	ug/kg	1200	J	5.0	Yes	S4VEM
2-Methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acetophenone	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Methylphenol	Target	1500	J	ug/kg	1500	J	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Spike	1300	J	ug/kg	1300	J	5.0	Yes	S4VEM
Hexachloroethane	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Isophorone	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Naphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Chloroaniline	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Caprolactam	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Spike	1400		ug/kg	1400		5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachlorocyclo-pentadiene	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
3-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acenaphthene	Spike	1300	J	ug/kg	1300	J	5.0	Yes	S4VEM
2,4-Dinitrophenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Nitrophenol	Spike	1500	J	ug/kg	1500	J	5.0	Yes	S4VEM
Dibenzofuran	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Spike	1100	J	ug/kg	1100	J	5.0	Yes	S4VEM
Diethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluorene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Chlorophenyl-phenyl ether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Atrazine	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Pentachlorophenol	Spike	1200	J	ug/kg	1200	J	5.0	Yes	S4VEM
Phenanthrene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Anthracene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Carbazole	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluoranthene	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Pyrene	Spike	2900	J+	ug/kg	2900		5.0	Yes	S4VEM
Butylbenzylphthalate	Target	1100	J	ug/kg	1100	J	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Chrysene	Target	490	J+	ug/kg	490	J	5.0	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	Target	1200	J	ug/kg	1200	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	360	J	ug/kg	360	J	5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	530	J	ug/kg	530	J	5.0	Yes	S4VEM
Benzo(a)pyrene	Target	170	J	ug/kg	170	J	5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Unknown-14	TIC	4200	J	ug/kg	4200	J	5.0	Yes	NV
Unknown-16	TIC	2500	J	ug/kg	2500	J	5.0	Yes	NV
Coprostan	TIC	7100	NJ	ug/kg	7100	NJ	5.0	Yes	NV
Unknown-23	TIC	3700	J	ug/kg	3700	J	5.0	Yes	NV
Unknown-15	TIC	2000	J	ug/kg	2000	J	5.0	Yes	NV
Unknown-07	TIC	2100	J	ug/kg	2100	J	5.0	Yes	NV
Unknown-09	TIC	2000	J	ug/kg	2000	J	5.0	Yes	NV
Unknown-02	TIC	14000	J	ug/kg	14000	J	5.0	Yes	NV
Unknown-13	TIC	3800	J	ug/kg	3800	J	5.0	Yes	NV
Unknown-22	TIC	3600	J	ug/kg	3600	J	5.0	Yes	NV
Unknown-08	TIC	5600	J	ug/kg	5600	J	5.0	Yes	NV
Unknown-01	TIC	13000	J	ug/kg	13000	J	5.0	Yes	NV
Unknown-10	TIC	2000	J	ug/kg	2000	J	5.0	Yes	NV
Unknown-21	TIC	4700	J	ug/kg	4700	J	5.0	Yes	NV
Octadecanoic acid	TIC	14000	NJ	ug/kg	14000	NJ	5.0	Yes	NV
Unknown-26	TIC	5500	J	ug/kg	5500	J	5.0	Yes	NV
Unknown-11	TIC	2600	J	ug/kg	2600	J	5.0	Yes	NV
Triphenyl phosphate	TIC	4300	NJ	ug/kg	4300	NJ	5.0	Yes	NV
Unknown-25	TIC	13000	J	ug/kg	13000	J	5.0	Yes	NV
Unknown-06	TIC	2700	J	ug/kg	2700	J	5.0	Yes	NV
Unknown-19	TIC	3300	J	ug/kg	3300	J	5.0	Yes	NV
9-Octadecenoic acid, (E)-	TIC	17000	NJ	ug/kg	17000	NJ	5.0	Yes	NV
Unknown-04	TIC	3100	J	ug/kg	3100	J	5.0	Yes	NV
Unknown-05	TIC	2100	J	ug/kg	2100	J	5.0	Yes	NV
Unknown-17	TIC	4500	J	ug/kg	4500	J	5.0	Yes	NV
Unknown-18	TIC	3300	J	ug/kg	3300	J	5.0	Yes	NV
Unknown-12	TIC	2400	J	ug/kg	2400	J	5.0	Yes	NV
Unknown-20	TIC	2800	J	ug/kg	2800	J	5.0	Yes	NV
Unknown-03	TIC	2100	J	ug/kg	2100	J	5.0	Yes	NV
Unknown-24	TIC	7100	J	ug/kg	7100	J	5.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHFR0MSD	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Chloromethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Vinyl chloride	Target	4.3	J	ug/kg	4.3	J	1.0	Yes	S4VEM
Bromomethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Chloroethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Spike	77		ug/kg	77		1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Acetone	Target	120		ug/kg	120		1.0	Yes	S4VEM
Carbon disulfide	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Methyl acetate	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Methylene chloride	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
2-Butanone	Target	51		ug/kg	51		1.0	Yes	S4VEM
Bromochloromethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Chloroform	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Cyclohexane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Benzene	Spike	64		ug/kg	64		1.0	Yes	S4VEM
1,2-Dichloroethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Trichloroethene	Spike	46		ug/kg	46		1.0	Yes	S4VEM
Methylcyclohexane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	16	U	ug/kg	16	U	1.0	Yes	S4VEM
Toluene	Spike	600		ug/kg	600	E	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
2-Hexanone	Target	16	U	ug/kg	16	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Chlorobenzene	Spike	27	J-	ug/kg	27		1.0	Yes	S4VEM
Ethylbenzene	Target	15		ug/kg	15		1.0	Yes	S4VEM
o-Xylene	Target	39		ug/kg	39		1.0	Yes	S4VEM
m, p-Xylene	Target	140		ug/kg	140		1.0	Yes	S4VEM
Styrene	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Bromoform	Target	8.2	U	ug/kg	8.2	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	2.5	J	ug/kg	2.5	J	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	8.2	UJ	ug/kg	8.2	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MSD	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	580	U	ug/kg	580	U	5.0	Yes	S4VEM
Benzaldehyde	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Phenol	Spike	1300	J	ug/kg	1300	J	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2-Chlorophenol	Spike	1200	J	ug/kg	1200	J	5.0	Yes	S4VEM
2-Methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acetophenone	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Methylphenol	Target	1400	J	ug/kg	1400	J	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Spike	1200	J	ug/kg	1200	J	5.0	Yes	S4VEM
Hexachloroethane	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Isophorone	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Naphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Chloroaniline	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Caprolactam	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Spike	1300	J	ug/kg	1300	J	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachlorocyclo-pentadiene	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
3-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Acenaphthene	Spike	1200	J	ug/kg	1200	J	5.0	Yes	S4VEM
2,4-Dinitrophenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4-Nitrophenol	Spike	1400	J	ug/kg	1400	J	5.0	Yes	S4VEM
Dibenzofuran	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Spike	1100	J	ug/kg	1100	J	5.0	Yes	S4VEM
Diethylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluorene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Chlorophenyl-phenyl ether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Atrazine	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Pentachlorophenol	Spike	1000	J	ug/kg	1000	J	5.0	Yes	S4VEM
Phenanthrene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Anthracene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Carbazole	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Fluoranthene	Target	2700	U	ug/kg	2700	U	5.0	Yes	S4VEM
Pyrene	Spike	2800		ug/kg	2800		5.0	Yes	S4VEM
Butylbenzylphthalate	Target	24000		ug/kg	24000	E	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Chrysene	Target	450	J	ug/kg	450	J	5.0	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	Target	5900		ug/kg	5900		5.0	Yes	S4VEM
Di-n-octylphthalate	Target	2700	UJ	ug/kg	2700	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	320	J	ug/kg	320	J	5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	450	J	ug/kg	450	J	5.0	Yes	S4VEM
Benzo(a)pyrene	Target	140	J	ug/kg	140	J	5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1400	UJ	ug/kg	1400	U	5.0	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1400	U	ug/kg	1400	U	5.0	Yes	S4VEM
Unknown-18	TIC	1400	J	ug/kg	1400	J	5.0	Yes	NV
Octadecanoic acid	TIC	7900	NJ	ug/kg	7900	NJ	5.0	Yes	NV
Unknown-16	TIC	3800	J	ug/kg	3800	J	5.0	Yes	NV
n-Hexadecanoic acid	TIC	6100	NJ	ug/kg	6100	NJ	5.0	Yes	NV
Unknown-08	TIC	2600	J	ug/kg	2600	J	5.0	Yes	NV
Unknown-04	TIC	2000	J	ug/kg	2000	J	5.0	Yes	NV
9-Octadecenoic acid, (E)-	TIC	9700	NJ	ug/kg	9700	NJ	5.0	Yes	NV
Unknown-22	TIC	1800	J	ug/kg	1800	J	5.0	Yes	NV
Unknown-02	TIC	6300	J	ug/kg	6300	J	5.0	Yes	NV
Unknown-15	TIC	4400	J	ug/kg	4400	J	5.0	Yes	NV
Unknown-09	TIC	3100	J	ug/kg	3100	J	5.0	Yes	NV
Unknown-03	TIC	2500	J	ug/kg	2500	J	5.0	Yes	NV
Unknown-17	TIC	1800	J	ug/kg	1800	J	5.0	Yes	NV
3-Bromobenzyl alcohol, trimethylsilyl et	TIC	4100	NJ	ug/kg	4100	NJ	5.0	Yes	NV
Unknown-21	TIC	2300	J	ug/kg	2300	J	5.0	Yes	NV
Unknown-10	TIC	2900	J	ug/kg	2900	J	5.0	Yes	NV
Unknown-01	TIC	6100	J	ug/kg	6100	J	5.0	Yes	NV
Unknown-12	TIC	2200	J	ug/kg	2200	J	5.0	Yes	NV
Unknown-14	TIC	2300	J	ug/kg	2300	J	5.0	Yes	NV
Unknown-05	TIC	2000	J	ug/kg	2000	J	5.0	Yes	NV
Unknown-11	TIC	1800	J	ug/kg	1800	J	5.0	Yes	NV
Phenanthrene, 2,3,5-trimethyl-	TIC	1900	NJ	ug/kg	1900	NJ	5.0	Yes	NV
Unknown-06	TIC	1700	J	ug/kg	1700	J	5.0	Yes	NV
Unknown-24	TIC	1400	J	ug/kg	1400	J	5.0	Yes	NV
Unknown-20	TIC	3700	J	ug/kg	3700	J	5.0	Yes	NV
Unknown-19	TIC	1600	J	ug/kg	1600	J	5.0	Yes	NV
Unknown-13	TIC	7600	J	ug/kg	7600	J	5.0	Yes	NV
Unknown-07	TIC	2300	J	ug/kg	2300	J	5.0	Yes	NV
Cholestane	TIC	13000	NJ	ug/kg	13000	NJ	5.0	Yes	NV
Unknown-23	TIC	1500	J	ug/kg	1500	J	5.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MSD	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Acenaphthylene	Target	7.8	J	ug/kg	7.8	J	5.0	Yes	S4VEM
Acenaphthene	Spike	20	J	ug/kg	20	J	5.0	Yes	S4VEM
Fluorene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Pentachlorophenol	Spike	56		ug/kg	56		5.0	Yes	S4VEM
Phenanthrene	Target	120		ug/kg	120		5.0	Yes	S4VEM
Anthracene	Target	29		ug/kg	29		5.0	Yes	S4VEM
Fluoranthene	Target	170		ug/kg	170		5.0	Yes	S4VEM
Pyrene	Spike	310		ug/kg	310		5.0	Yes	S4VEM
Benzo(a)anthracene	Target	170		ug/kg	170		5.0	Yes	S4VEM
Chrysene	Target	410		ug/kg	410		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	450		ug/kg	450	E	5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(a)pyrene	Target	170		ug/kg	170		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	33	J	ug/kg	33		5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	27	U	ug/kg	27	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	67	J	ug/kg	67		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MSD	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	140		ug/kg	140		1.0	Yes	S4VEM
Aroclor-1221	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1232	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1242	Target	180		ug/kg	180		1.0	Yes	S4VEM
Aroclor-1248	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1254	Target	98		ug/kg	98		1.0	Yes	S4VEM
Aroclor-1260	Spike	150		ug/kg	150		1.0	Yes	S4VEM
Aroclor-1262	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM
Aroclor-1268	Target	55	U	ug/kg	55	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR0MSD	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 60.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
beta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
delta-BHC	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Spike	14	J+	ug/kg	14		1.0	Yes	S4VEM
Heptachlor	Spike	14	J+	ug/kg	14		1.0	Yes	S4VEM
Aldrin	Spike	14	J+	ug/kg	14		1.0	Yes	S4VEM
Heptachlor epoxide	Target	0.45	J+	ug/kg	0.45	J	1.0	Yes	S4VEM
Endosulfan I	Target	2.8	U	ug/kg	2.8	U	1.0	Yes	S4VEM
Dieldrin	Spike	37	J+	ug/kg	37		1.0	Yes	S4VEM
4,4'-DDE	Target	6.3	J+	ug/kg	6.3		1.0	Yes	S4VEM
Endrin	Spike	34	J+	ug/kg	34		1.0	Yes	S4VEM
Endosulfan II	Target	5.4	U	ug/kg	5.4	U	1.0	Yes	S4VEM
4,4'-DDD	Target	4.1	J+	ug/kg	4.1	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	1.0	J+	ug/kg	1.0	JP	1.0	Yes	S4VEM
4,4'-DDT	Spike	45	J+	ug/kg	45		1.0	Yes	S4VEM
Methoxychlor	Target	3.8	J+	ug/kg	3.8	JP	1.0	Yes	S4VEM
Endrin ketone	Target	2.5	J+	ug/kg	2.5	JP	1.0	Yes	S4VEM
Endrin aldehyde	Target	2.4	J+	ug/kg	2.4	J	1.0	Yes	S4VEM
cis-Chlordane	Target	2.0	J+	ug/kg	2.0	JP	1.0	Yes	S4VEM
trans-Chlordane	Target	0.99	J+	ug/kg	0.99	JP	1.0	Yes	S4VEM
Toxaphene	Target	280	U	ug/kg	280	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHFR1	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TA02SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:13:00
% Moisture :		% Solids : 82.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	420	UJK	ug/kg	420	U	5.0	Yes	S4VEM
Benzaldehyde	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Phenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2-Chlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Methylphenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Acetophenone	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
4-Methylphenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Hexachloroethane	Target	1000	UJK	ug/kg	1000	U	5.0	Yes	S4VEM
Nitrobenzene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Isophorone	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Nitrophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4-Dimethylphenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4-Dichlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Naphthalene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
4-Chloroaniline	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Hexachlorobutadiene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Caprolactam	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	2000	UJK	ug/kg	2000	U	5.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
1,1'-Biphenyl	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Chloronaphthalene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2-Nitroaniline	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Dimethylphthalate	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
3-Nitroaniline	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Acenaphthene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
2,4-Dinitrophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
4-Nitrophenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Dibenzofuran	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Diethylphthalate	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Fluorene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
4-Nitroaniline	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Hexachlorobenzene	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Atrazine	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	2000	R	ug/kg	2000	U	5.0	No	S4VEM
Phenanthrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Anthracene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Carbazole	Target	2000	U	ug/kg	2000	U	5.0	Yes	S4VEM
Di-n-butylphthalate	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Fluoranthene	Target	100	R	ug/kg	100	J	5.0	No	S4VEM
Pyrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Butylbenzylphthalate	Target	190	JQ	ug/kg	190	J	5.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	2000	UJK	ug/kg	2000	U	5.0	Yes	S4VEM
Benzo(a)anthracene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Chrysene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	200	JQ	ug/kg	200	J	5.0	Yes	S4VEM
Di-n-octylphthalate	Target	2000	UJK	ug/kg	2000	U	5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	200	R	ug/kg	200	J	5.0	No	S4VEM
Benzo(k)fluoranthene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Benzo(a)pyrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	1000	R	ug/kg	1000	U	5.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	1000	U	ug/kg	1000	U	5.0	Yes	S4VEM
Unknown-11	TIC	680	R	ug/kg	680	J	5.0	No	NV
Propanoic acid, 2-methyl-, 3-hydroxy-2,4	TIC	1200	R	ug/kg	1200	NJ	5.0	No	NV
Unknown-10	TIC	890	R	ug/kg	890	J	5.0	No	NV
Unknown-08	TIC	910	R	ug/kg	910	J	5.0	No	NV
Unknown-06	TIC	860	R	ug/kg	860	J	5.0	No	NV
Unknown-01	TIC	450	R	ug/kg	450	J	5.0	No	NV
Unknown-09	TIC	1100	R	ug/kg	1100	J	5.0	No	NV
Unknown-03	TIC	1700	R	ug/kg	1700	J	5.0	No	NV
Unknown-07	TIC	730	R	ug/kg	730	J	5.0	No	NV
Unknown-12	TIC	430	R	ug/kg	430	J	5.0	No	NV
Unknown-04	TIC	420	R	ug/kg	420	J	5.0	No	NV
Unknown-13	TIC	540	R	ug/kg	540	J	5.0	No	NV
Coprostone	TIC	730	R	ug/kg	730	NJ	5.0	No	NV
1,3-Pentanediol, 2,2,4-trimethyl-	TIC	1200	R	ug/kg	1200	NJ	5.0	No	NV
Unknown Alkane-01	TIC	660	R	ug/kg	660	J	5.0	No	NV
Unknown-02	TIC	990	R	ug/kg	990	J	5.0	No	NV
28-Nor-17.beta.(H)-hopane	TIC	770	R	ug/kg	770	NJ	5.0	No	NV
Unknown-05	TIC	1500	R	ug/kg	1500	J	5.0	No	NV
Tetrachloro-o-benzoquinone	TIC	780	R	ug/kg	780	NJ	5.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR1	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TA02SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:13:00
% Moisture :		% Solids : 82.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
beta-BHC	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
delta-BHC	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Heptachlor	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Aldrin	Target	2.0	U	ug/kg	2.0	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	2.0	U	ug/kg	0.34	JP	1.0	Yes	S4VEM
Endosulfan I	Target	2.0	U	ug/kg	0.39	JP	1.0	Yes	S4VEM
Dieldrin	Target	1.8	JQ	ug/kg	1.8	J	1.0	Yes	S4VEM
4,4'-DDE	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endrin	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endosulfan II	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
4,4'-DDD	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	0.33	JK	ug/kg	0.33	JP	1.0	Yes	S4VEM
4,4'-DDT	Target	0.93	JQ	ug/kg	0.93	J	1.0	Yes	S4VEM
Methoxychlor	Target	20	U	ug/kg	0.64	JP	1.0	Yes	S4VEM
Endrin ketone	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	3.9	U	ug/kg	3.9	U	1.0	Yes	S4VEM
cis-Chlordane	Target	1.1	JQ	ug/kg	1.1	J	1.0	Yes	S4VEM
trans-Chlordane	Target	0.99	JK	ug/kg	0.99	JP	1.0	Yes	S4VEM
Toxaphene	Target	200	U	ug/kg	200	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR1	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TA02SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:13:00
% Moisture :		% Solids : 82.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Chloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Bromomethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Chloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Acetone	Target	920	R	ug/kg	920	E	1.0	No	S4VEM
Carbon disulfide	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Methylene chloride	Target	1.3	JQ	ug/kg	1.3	J	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
2-Butanone	Target	7000	R	ug/kg	7000	E	1.0	No	S4VEM
Bromochloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Chloroform	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Benzene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	200		ug/kg	200		1.0	Yes	S4VEM
Toluene	Target	440	R	ug/kg	440	E	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Ethylbenzene	Target	58		ug/kg	58		1.0	Yes	S4VEM
o-Xylene	Target	61		ug/kg	61		1.0	Yes	S4VEM
m, p-Xylene	Target	190		ug/kg	190		1.0	Yes	S4VEM
Styrene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Bromoform	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.9		ug/kg	5.9		1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.1	UJK	ug/kg	5.1	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR1	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TA02SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:13:00
% Moisture :		% Solids : 82.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM
Aroclor-1221	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM
Aroclor-1232	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM
Aroclor-1242	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM
Aroclor-1248	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM
Aroclor-1254	Target	39	U	ug/kg	9.9	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	6.9	JK	ug/kg	6.9	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM
Aroclor-1268	Target	39	U	ug/kg	39	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR1	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TA02SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:13:00
% Moisture :		% Solids : 82.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	20	U	ug/kg	20	U	5.0	Yes	S4VEM
2-Methylnaphthalene	Target	20	U	ug/kg	20	U	5.0	Yes	S4VEM
Acenaphthylene	Target	4.7	JQ	ug/kg	4.7	J	5.0	Yes	S4VEM
Acenaphthene	Target	3.8	JQ	ug/kg	3.8	J	5.0	Yes	S4VEM
Fluorene	Target	20	U	ug/kg	20	U	5.0	Yes	S4VEM
Pentachlorophenol	Target	40	U	ug/kg	40	U	5.0	Yes	S4VEM
Phenanthrene	Target	50		ug/kg	50		5.0	Yes	S4VEM
Anthracene	Target	14	JQ	ug/kg	14	J	5.0	Yes	S4VEM
Fluoranthene	Target	100		ug/kg	100		5.0	Yes	S4VEM
Pyrene	Target	85	JK	ug/kg	85		5.0	Yes	S4VEM
Benzo(a)anthracene	Target	56	JK	ug/kg	56		5.0	Yes	S4VEM
Chrysene	Target	53	JK	ug/kg	53		5.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	92		ug/kg	92		5.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	28		ug/kg	28		5.0	Yes	S4VEM
Benzo(a)pyrene	Target	62		ug/kg	62		5.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	27	JK	ug/kg	27		5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	20	U	ug/kg	20	U	5.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	35	JK	ug/kg	35		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR1ME	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 82.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Chloromethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Vinyl chloride	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Bromomethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Chloroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Trichlorofluoromethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,1-Dichloroethene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Acetone	Target	1800		ug/kg	1800		1.0	Yes	S4VEM
Carbon disulfide	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Methyl acetate	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Methylene chloride	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
trans-1,2-Dichloroethene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Methyl tert-butyl ether	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,1-Dichloroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
cis-1,2-Dichloroethene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
2-Butanone	Target	11000		ug/kg	11000		1.0	Yes	S4VEM
Bromochloromethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Chloroform	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,1,1-Trichloroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Cyclohexane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Carbon tetrachloride	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Benzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2-Dichloroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Trichloroethene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Methylcyclohexane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2-Dichloropropane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Bromodichloromethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
cis-1,3-Dichloropropene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
4-Methyl-2-pentanone	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Toluene	Target	510		ug/kg	510		1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,1,2-Trichloroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Tetrachloroethene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
2-Hexanone	Target	600	R	ug/kg	600	U	1.0	No	S4VEM
Dibromochloromethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2-Dibromoethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Chlorobenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Ethylbenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
o-Xylene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
m, p-Xylene	Target	310	R	ug/kg	310		1.0	No	S4VEM
Styrene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Bromoform	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
Isopropylbenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,1,2,2-Tetrachloroethane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,3-Dichlorobenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,4-Dichlorobenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2-Dichlorobenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2-Dibromo-3-chloropropane	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2,4-Trichlorobenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM
1,2,3-Trichlorobenzene	Target	300	R	ug/kg	300	U	1.0	No	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR2	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TA03SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 48.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	3.1	JQ	ug/kg	3.1	J	1.0	Yes	S4VEM
Acenaphthylene	Target	23		ug/kg	23		1.0	Yes	S4VEM
Acenaphthene	Target	33		ug/kg	33		1.0	Yes	S4VEM
Fluorene	Target	48		ug/kg	48		1.0	Yes	S4VEM
Pentachlorophenol	Target	41		ug/kg	41		1.0	Yes	S4VEM
Phenanthrene	Target	660	R	ug/kg	660	E	1.0	No	S4VEM
Anthracene	Target	330		ug/kg	330	D	5.0	Yes	S4VEM
Fluoranthene	Target	1400	R	ug/kg	1400	E	1.0	No	S4VEM
Pyrene	Target	950	R	ug/kg	950	E	1.0	No	S4VEM
Benzo(a)anthracene	Target	510	R	ug/kg	510	E	1.0	No	S4VEM
Chrysene	Target	500	R	ug/kg	500	E	1.0	No	S4VEM
Benzo(b)fluoranthene	Target	690	R	ug/kg	690	E	1.0	No	S4VEM
Benzo(k)fluoranthene	Target	350	R	ug/kg	350	D	5.0	No	S4VEM
Benzo(a)pyrene	Target	430	R	ug/kg	430	E	1.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	350		ug/kg	350	D	5.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	320		ug/kg	320	D	5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR2	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TA03SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 48.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM
Aroclor-1221	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM
Aroclor-1232	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM
Aroclor-1242	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM
Aroclor-1248	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM
Aroclor-1254	Target	68	U	ug/kg	8.5	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	68	U	ug/kg	2.9	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM
Aroclor-1268	Target	68	U	ug/kg	68	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHFR2	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TA03SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 48.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Chloromethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Vinyl chloride	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Bromomethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Chloroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Acetone	Target	250		ug/kg	250		1.0	Yes	S4VEM
Carbon disulfide	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Methyl acetate	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Methylene chloride	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
2-Butanone	Target	78		ug/kg	78		1.0	Yes	S4VEM
Bromochloromethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Chloroform	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Cyclohexane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Benzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Trichloroethene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	23	U	ug/kg	23	U	1.0	Yes	S4VEM
Toluene	Target	5.2	JQ	ug/kg	5.2	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
2-Hexanone	Target	23	U	ug/kg	23	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Chlorobenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Ethylbenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
o-Xylene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
m, p-Xylene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Styrene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Bromoform	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	11	U	ug/kg	11	U	1.0	Yes	S4VEM
.beta.-Myrcene	TIC	31	R	ug/kg	31	NJ	1.0	No	NV
.gamma.-Terpinene	TIC	150	R	ug/kg	150	NJ	1.0	No	NV
o-Cymene	TIC	28	R	ug/kg	28	NJ	1.0	No	NV
Dimethyl sulfide	TIC	20	R	ug/kg	20	NJ	1.0	No	NV
Unknown-02	TIC	20	R	ug/kg	20	J	1.0	No	NV
Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	TIC	26	R	ug/kg	26	NJ	1.0	No	NV
3-Carene	TIC	22	R	ug/kg	22	NJ	1.0	No	NV
Unknown-01	TIC	27	R	ug/kg	27	J	1.0	No	NV
.alpha.-Phellandrene	TIC	30	R	ug/kg	30	NJ	1.0	No	NV
.beta.-Pinene	TIC	21	R	ug/kg	21	NJ	1.0	No	NV
Unknown-03	TIC	19	R	ug/kg	19	J	1.0	No	NV
Eucalyptol	TIC	73	R	ug/kg	73	NJ	1.0	No	NV
Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	TIC	14	R	ug/kg	14	NJ	1.0	No	NV
D-Limonene	TIC	68	R	ug/kg	68	NJ	1.0	No	NV
Cyclohexene, 1-methyl-4-(1-methylethylid	TIC	50	R	ug/kg	50	NJ	1.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
.alpha.-Pinene	TIC	88	R	ug/kg	88	NJ	1.0	No	NV
p-Cymene	TIC	91	R	ug/kg	91	NJ	1.0	No	NV
1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	TIC	110	R	ug/kg	110	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR2	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TA03SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 48.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	140	UJK	ug/kg	140	U	1.0	Yes	S4VEM
Benzaldehyde	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Phenol	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2-Methylphenol	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Acetophenone	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
4-Methylphenol	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Hexachloroethane	Target	350	UJK	ug/kg	350	U	1.0	Yes	S4VEM
Nitrobenzene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Isophorone	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Naphthalene	Target	350	R	ug/kg	350	U	1.0	No	S4VEM
4-Chloroaniline	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Caprolactam	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	350	R	ug/kg	350	U	1.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	680	UJK	ug/kg	680	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	350	R	ug/kg	350	U	1.0	No	S4VEM
3-Nitroaniline	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Acenaphthene	Target	350	R	ug/kg	350	U	1.0	No	S4VEM
2,4-Dinitrophenol	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Dibenzofuran	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Diethylphthalate	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Fluorene	Target	350	R	ug/kg	350	U	1.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Atrazine	Target	680	U	ug/kg	680	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	680	R	ug/kg	680	U	1.0	No	S4VEM
Phenanthrene	Target	600		ug/kg	600		1.0	Yes	S4VEM
Anthracene	Target	170	R	ug/kg	170	J	1.0	No	S4VEM
Carbazole	Target	110	JQ	ug/kg	110	J	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
Fluoranthene	Target	1100		ug/kg	1100		1.0	Yes	S4VEM
Pyrene	Target	940		ug/kg	940		1.0	Yes	S4VEM
Butylbenzylphthalate	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	680	UJK	ug/kg	680	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	370		ug/kg	370		1.0	Yes	S4VEM
Chrysene	Target	430		ug/kg	430		1.0	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	Target	270	JQ	ug/kg	270	J	1.0	Yes	S4VEM
Di-n-octylphthalate	Target	680	UJK	ug/kg	680	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	780	JK	ug/kg	780		1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	350	JK	ug/kg	350		1.0	Yes	S4VEM
Benzo(a)pyrene	Target	380	JK	ug/kg	380		1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	110	R	ug/kg	110	J	1.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	350	R	ug/kg	350	U	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	100	R	ug/kg	100	J	1.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM
4H-Cyclopenta[def]phenanthrene	TIC	790	R	ug/kg	790	NJ	1.0	No	NV
Unknown-05	TIC	550	R	ug/kg	550	J	1.0	No	NV
Unknown-09	TIC	350	R	ug/kg	350	J	1.0	No	NV
Unknown-10	TIC	710	R	ug/kg	710	J	1.0	No	NV
Unknown-12	TIC	370	R	ug/kg	370	J	1.0	No	NV
9-Octadecenoic acid, (E)-	TIC	850	R	ug/kg	850	NJ	1.0	No	NV
Unknown-06	TIC	840	R	ug/kg	840	J	1.0	No	NV
Unknown-02	TIC	720	R	ug/kg	720	J	1.0	No	NV
Unknown Alkane-03	TIC	700	R	ug/kg	700	J	1.0	No	NV
Eicosanoic acid	TIC	670	R	ug/kg	670	NJ	1.0	No	NV
6H-Benz[de]anthracen-6-one	TIC	680	R	ug/kg	680	NJ	1.0	No	NV
Unknown Alkane-02	TIC	320	R	ug/kg	320	J	1.0	No	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	TIC	510	R	ug/kg	510	NJ	1.0	No	NV
Dehydroabietic acid	TIC	770	R	ug/kg	770	NJ	1.0	No	NV
Docosanoic acid	TIC	470	R	ug/kg	470	NJ	1.0	No	NV
Cholestane	TIC	2600	R	ug/kg	2600	NJ	1.0	No	NV
Unknown-03	TIC	630	R	ug/kg	630	J	1.0	No	NV
Unknown-13	TIC	7700	R	ug/kg	7700	J	1.0	No	NV
Tetracosanoic acid	TIC	710	R	ug/kg	710	NJ	1.0	No	NV
Unknown Alkane-01	TIC	550	R	ug/kg	550	J	1.0	No	NV
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	TIC	550	R	ug/kg	550	NJ	1.0	No	NV
Unknown-04	TIC	890	R	ug/kg	890	J	1.0	No	NV
Unknown-11	TIC	460	R	ug/kg	460	J	1.0	No	NV
Unknown-01	TIC	880	R	ug/kg	880	J	1.0	No	NV
Unknown-08	TIC	450	R	ug/kg	450	J	1.0	No	NV
Pyrene, 1-methyl-	TIC	520	R	ug/kg	520	NJ	1.0	No	NV
Unknown-07	TIC	380	R	ug/kg	380	J	1.0	No	NV
Propiconazole	TIC	520	R	ug/kg	520	NJ	1.0	No	NV
11H-Benzo[b]fluorene	TIC	810	R	ug/kg	810	NJ	1.0	No	NV
2-(2-Bromo-4-methoxyphenoxy)-N'-[1-(2-th	TIC	460	R	ug/kg	460	NJ	1.0	No	NV
1-Nonadecene	TIC	540	R	ug/kg	540	NJ	1.0	No	NV
Benzo[b]naphtho[2,3-d]furan	TIC	350	R	ug/kg	350	NJ	1.0	No	NV
Cyclopenta(cd)pyrene, 3,4-	TIC	320	R	ug/kg	320	NJ	1.0	Yes	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
dihydro-	TIC	320	R	ug/kg	320	NJ	1.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR2	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TA03SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 48.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
beta-BHC	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
delta-BHC	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Heptachlor	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Aldrin	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	1.5	JQ	ug/kg	1.5	J	1.0	Yes	S4VEM
Endosulfan I	Target	3.5	U	ug/kg	3.5	U	1.0	Yes	S4VEM
Dieldrin	Target	5.0	JQ	ug/kg	5.0	J	1.0	Yes	S4VEM
4,4'-DDE	Target	4.3	JQ	ug/kg	4.3	J	1.0	Yes	S4VEM
Endrin	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
Endosulfan II	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
4,4'-DDD	Target	1.0	JK	ug/kg	1.0	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Target	6.8	U	ug/kg	0.56	JP	1.0	Yes	S4VEM
4,4'-DDT	Target	5.4	JQ	ug/kg	5.4	J	1.0	Yes	S4VEM
Methoxychlor	Target	35	U	ug/kg	0.93	JP	1.0	Yes	S4VEM
Endrin ketone	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	6.8	U	ug/kg	6.8	U	1.0	Yes	S4VEM
cis-Chlordane	Target	1.2	JQ	ug/kg	1.2	J	1.0	Yes	S4VEM
trans-Chlordane	Target	3.5	U	ug/kg	0.56	JP	1.0	Yes	S4VEM
Toxaphene	Target	350	U	ug/kg	350	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR3	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TA04SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:34:00
% Moisture :		% Solids : 67.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM
Aroclor-1221	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM
Aroclor-1232	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM
Aroclor-1242	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM
Aroclor-1248	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM
Aroclor-1254	Target	48	U	ug/kg	9.4	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	48	U	ug/kg	3.7	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM
Aroclor-1268	Target	48	U	ug/kg	48	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR3	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TA04SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:34:00
% Moisture :		% Solids : 67.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
beta-BHC	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
delta-BHC	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.4	U	ug/kg	0.73	JP	1.0	Yes	S4VEM
Heptachlor	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Aldrin	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	0.73	JQ	ug/kg	0.73	J	1.0	Yes	S4VEM
Endosulfan I	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Dieldrin	Target	7.8	U	ug/kg	7.8	P	1.0	Yes	S4VEM
4,4'-DDE	Target	0.77	JK	ug/kg	0.77	JP	1.0	Yes	S4VEM
Endrin	Target	4.8	U	ug/kg	1.1	JP	1.0	Yes	S4VEM
Endosulfan II	Target	4.8	U	ug/kg	4.8	U	1.0	Yes	S4VEM
4,4'-DDD	Target	4.8	U	ug/kg	4.8	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	0.47	JQ	ug/kg	0.47	J	1.0	Yes	S4VEM
4,4'-DDT	Target	5.7		ug/kg	5.7		1.0	Yes	S4VEM
Methoxychlor	Target	24	U	ug/kg	1.2	JP	1.0	Yes	S4VEM
Endrin ketone	Target	4.8	U	ug/kg	4.8	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	4.8	U	ug/kg	0.63	JP	1.0	Yes	S4VEM
cis-Chlordane	Target	1.7	JK	ug/kg	1.7	JP	1.0	Yes	S4VEM
trans-Chlordane	Target	2.4	U	ug/kg	2.1	JP	1.0	Yes	S4VEM
Toxaphene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No.: JHFR0	Lab Code: EQI
Sample Number: JHFR3	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TA04SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:34:00
% Moisture :		% Solids : 67.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	12		ug/kg	12		1.0	Yes	S4VEM
2-Methylnaphthalene	Target	4.9		ug/kg	4.9		1.0	Yes	S4VEM
Acenaphthylene	Target	32		ug/kg	32		1.0	Yes	S4VEM
Acenaphthene	Target	67		ug/kg	67		1.0	Yes	S4VEM
Fluorene	Target	100		ug/kg	100	D	10.0	Yes	S4VEM
Pentachlorophenol	Target	29		ug/kg	29		1.0	Yes	S4VEM
Phenanthrene	Target	1300	R	ug/kg	1300	E	1.0	No	S4VEM
Anthracene	Target	490	R	ug/kg	490	D	10.0	No	S4VEM
Fluoranthene	Target	2600	R	ug/kg	2600	E	1.0	No	S4VEM
Pyrene	Target	1800	R	ug/kg	1800	E	1.0	No	S4VEM
Benzo(a)anthracene	Target	850	R	ug/kg	850	E	1.0	No	S4VEM
Chrysene	Target	900	R	ug/kg	900	E	1.0	No	S4VEM
Benzo(b)fluoranthene	Target	1100	R	ug/kg	1100	E	1.0	No	S4VEM
Benzo(k)fluoranthene	Target	480		ug/kg	480	D	10.0	Yes	S4VEM
Benzo(a)pyrene	Target	700	R	ug/kg	700	E	1.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	550		ug/kg	550	D	10.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	4.8	U	ug/kg	4.8	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	480		ug/kg	480	D	10.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR3	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TA04SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:34:00
% Moisture :		% Solids : 67.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Vinyl chloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromomethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Acetone	Target	70		ug/kg	70		1.0	Yes	S4VEM
Carbon disulfide	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methyl acetate	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methylene chloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
2-Butanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Bromochloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chloroform	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Cyclohexane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Benzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Trichloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Toluene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
2-Hexanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Chlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Ethylbenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
o-Xylene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
m, p-Xylene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Styrene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromoform	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Unknown-01	TIC	13	R	ug/kg	13	J	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR3	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TA04SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:34:00
% Moisture :		% Solids : 67.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	100	UJK	ug/kg	100	U	1.0	Yes	S4VEM
Benzaldehyde	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Phenol	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Methylphenol	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Acetophenone	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
4-Methylphenol	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Hexachloroethane	Target	250	UJK	ug/kg	250	U	1.0	Yes	S4VEM
Nitrobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Isophorone	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Naphthalene	Target	250	R	ug/kg	250	U	1.0	No	S4VEM
4-Chloroaniline	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Caprolactam	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	250	R	ug/kg	250	U	1.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	480	UJK	ug/kg	480	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	250	R	ug/kg	250	U	1.0	No	S4VEM
3-Nitroaniline	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Acenaphthene	Target	79	R	ug/kg	79	J	1.0	No	S4VEM
2,4-Dinitrophenol	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Dibenzofuran	Target	34	JQ	ug/kg	34	J	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Diethylphthalate	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Fluorene	Target	77	R	ug/kg	77	J	1.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Atrazine	Target	480	U	ug/kg	480	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	480	R	ug/kg	480	U	1.0	No	S4VEM
Phenanthrene	Target	1400		ug/kg	1400		1.0	Yes	S4VEM
Anthracene	Target	330		ug/kg	330		1.0	Yes	S4VEM
Carbazole	Target	210	JQ	ug/kg	210	J	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Fluoranthene	Target	2300		ug/kg	2300		1.0	Yes	S4VEM
Pyrene	Target	2200		ug/kg	2200		1.0	Yes	S4VEM
Butylbenzylphthalate	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	480	UJK	ug/kg	480	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	710		ug/kg	710		1.0	Yes	S4VEM
Chrysene	Target	860		ug/kg	860		1.0	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	Target	490		ug/kg	490		1.0	Yes	S4VEM
Di-n-octylphthalate	Target	480	UJK	ug/kg	480	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	1500	JK	ug/kg	1500		1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	830	R	ug/kg	830		1.0	No	S4VEM
Benzo(a)pyrene	Target	770	JK	ug/kg	770		1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	210	R	ug/kg	210	J	1.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	250	R	ug/kg	250	U	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	180	R	ug/kg	180	J	1.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Cholestane	TIC	810	R	ug/kg	810	NJ	1.0	No	NV
Chrysene, 1-methyl-	TIC	330	R	ug/kg	330	NJ	1.0	No	NV
Cyclopentadecanone, 2-hydroxy-	TIC	520	R	ug/kg	520	NJ	1.0	No	NV
Unknown-12	TIC	2500	R	ug/kg	2500	J	1.0	No	NV
Cyclopenta(def)phenanthrenone	TIC	160	R	ug/kg	160	NJ	1.0	No	NV
Tetracosanoic acid	TIC	630	R	ug/kg	630	NJ	1.0	No	NV
Unknown-06	TIC	340	R	ug/kg	340	J	1.0	No	NV
11H-Benzo[a]fluoren-11-one	TIC	600	R	ug/kg	600	NJ	1.0	No	NV
15-Isobutyl-(13.alpha.H)-isocopalane	TIC	1000	R	ug/kg	1000	NJ	1.0	No	NV
Unknown Alkane-03	TIC	1000	R	ug/kg	1000	J	1.0	No	NV
4H-Cyclopenta[def]phenanthrene	TIC	420	R	ug/kg	420	NJ	1.0	No	NV
11H-Benzo[b]fluorene	TIC	300	R	ug/kg	300	NJ	1.0	No	NV
n-Hexadecanoic acid	TIC	140	R	ug/kg	140	NJ	1.0	No	NV
Benzo(b)naphtho(1,2-d)furan	TIC	98	R	ug/kg	98	NJ	1.0	No	NV
Unknown-05	TIC	340	R	ug/kg	340	J	1.0	No	NV
Unknown-04	TIC	600	R	ug/kg	600	J	1.0	No	NV
Unknown-11	TIC	630	R	ug/kg	630	J	1.0	No	NV
Tetrachloro-o-benzoquinone	TIC	1500	R	ug/kg	1500	NJ	1.0	No	NV
Unknown-09	TIC	550	R	ug/kg	550	J	1.0	No	NV
Docosanoic acid	TIC	350	R	ug/kg	350	NJ	1.0	No	NV
Unknown-13	TIC	1300	R	ug/kg	1300	J	1.0	No	NV
Unknown-10	TIC	380	R	ug/kg	380	J	1.0	No	NV
Unknown Alkane-01	TIC	460	R	ug/kg	460	J	1.0	No	NV
Unknown-08	TIC	460	R	ug/kg	460	J	1.0	No	NV
9-(Cyanomethylene)fluorene	TIC	550	R	ug/kg	550	NJ	1.0	No	NV
11H-Benzo[a]fluorene	TIC	220	R	ug/kg	220	NJ	1.0	No	NV
Fluoranthene, 2-methyl-	TIC	620	R	ug/kg	620	NJ	1.0	No	NV
Unknown-07	TIC	670	R	ug/kg	670	J	1.0	No	NV
Unknown-03	TIC	470	R	ug/kg	470	J	1.0	No	NV
Unknown-02	TIC	600	R	ug/kg	600	J	1.0	No	NV
Unknown Alkane-02	TIC	390	R	ug/kg	390	J	1.0	No	NV
Pyrene, 4-methyl-	TIC	620	R	ug/kg	620	NJ	1.0	No	NV
cis-Vaccenic acid	TIC	170	R	ug/kg	170	NJ	1.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Unknown-01	TIC	320	R	ug/kg	320	J	1.0	No	NV
Pyrene, 1-methyl-	TIC	440	R	ug/kg	440	NJ	1.0	No	NV
Benzo[b]naphtho[2,1-d]thiophene	TIC	820	R	ug/kg	820	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR4	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TA05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:09:00
% Moisture :		% Solids : 62.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
beta-BHC	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
delta-BHC	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
Heptachlor	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
Aldrin	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	0.78	JQ	ug/kg	0.78	JP	1.0	Yes	S4VEM
Endosulfan I	Target	2.7	U	ug/kg	2.7	U	1.0	Yes	S4VEM
Dieldrin	Target	1.9	JQ	ug/kg	1.9	J	1.0	Yes	S4VEM
4,4'-DDE	Target	2.9	JQ	ug/kg	2.9	J	1.0	Yes	S4VEM
Endrin	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Endosulfan II	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
4,4'-DDD	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
4,4'-DDT	Target	2.2	JK	ug/kg	2.2	JP	1.0	Yes	S4VEM
Methoxychlor	Target	27	U	ug/kg	27	U	1.0	Yes	S4VEM
Endrin ketone	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	5.3	U	ug/kg	5.3	U	1.0	Yes	S4VEM
cis-Chlordane	Target	2.0	JQ	ug/kg	2.0	J	1.0	Yes	S4VEM
trans-Chlordane	Target	1.8	JK	ug/kg	1.8	JP	1.0	Yes	S4VEM
Toxaphene	Target	270	U	ug/kg	270	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR4	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TA05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:09:00
% Moisture :		% Solids : 62.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM
Aroclor-1221	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM
Aroclor-1232	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM
Aroclor-1242	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM
Aroclor-1248	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM
Aroclor-1254	Target	52	U	ug/kg	2.3	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	2.6	JQ	ug/kg	2.6	J	1.0	Yes	S4VEM
Aroclor-1262	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM
Aroclor-1268	Target	52	U	ug/kg	52	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR4	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TA05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:09:00
% Moisture :		% Solids : 62.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	110	UJK	ug/kg	110	U	1.0	Yes	S4VEM
Benzaldehyde	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Phenol	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2-Methylphenol	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Acetophenone	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
4-Methylphenol	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Hexachloroethane	Target	260	UJK	ug/kg	260	U	1.0	Yes	S4VEM
Nitrobenzene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Isophorone	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Naphthalene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
4-Chloroaniline	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Caprolactam	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	510	UJK	ug/kg	510	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
3-Nitroaniline	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Acenaphthene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
2,4-Dinitrophenol	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Dibenzofuran	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Diethylphthalate	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Fluorene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Atrazine	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	510	R	ug/kg	510	U	1.0	No	S4VEM
Phenanthrene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Anthracene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Carbazole	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Fluoranthene	Target	510	R	ug/kg	510	U	1.0	No	S4VEM
Pyrene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Butylbenzylphthalate	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	510	UJK	ug/kg	510	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Chrysene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
Di-n-octylphthalate	Target	510	U	ug/kg	510	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Benzo(k)fluoranthene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Benzo(a)pyrene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	260	R	ug/kg	260	U	1.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	260	U	ug/kg	260	U	1.0	Yes	S4VEM
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	TIC	200	R	ug/kg	200	NJ	1.0	No	NV
Unknown Aldol Condensate	TIC	490	R	ug/kg	490	AJ	1.0	No	NV
Unknown-07	TIC	320	R	ug/kg	320	J	1.0	No	NV
A'-Neogammacer-22(29)-ene	TIC	170	R	ug/kg	170	NJ	1.0	No	NV
Unknown Alkane-01	TIC	170	R	ug/kg	170	J	1.0	No	NV
4,4,6a,6b,8a,11,12,14b-Octamethyl-1,4,4a	TIC	120	R	ug/kg	120	NJ	1.0	No	NV
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	TIC	350	R	ug/kg	350	NJ	1.0	No	NV
Unknown-09	TIC	230	R	ug/kg	230	J	1.0	No	NV
Unknown-06	TIC	130	R	ug/kg	130	J	1.0	No	NV
.beta.-Sitosterol	TIC	150	R	ug/kg	150	NJ	1.0	No	NV
Unknown-05	TIC	290	R	ug/kg	290	J	1.0	No	NV
Unknown-04	TIC	160	R	ug/kg	160	J	1.0	No	NV
Unknown-08	TIC	140	R	ug/kg	140	J	1.0	No	NV
Unknown-03	TIC	140	R	ug/kg	140	J	1.0	No	NV
Unknown-02	TIC	410	R	ug/kg	410	J	1.0	No	NV
Unknown-01	TIC	180	R	ug/kg	180	J	1.0	No	NV
Cyclopentasiloxane, decamethyl-	TIC	130	R	ug/kg	130	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: JHFR4	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TA05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:09:00
% Moisture :		% Solids : 62.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Chloromethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Vinyl chloride	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Bromomethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Chloroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Acetone	Target	34		ug/kg	34		1.0	Yes	S4VEM
Carbon disulfide	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Methyl acetate	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Methylene chloride	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
2-Butanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Bromochloromethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Chloroform	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Cyclohexane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Benzene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Trichloroethene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Toluene	Target	2.9	JQ	ug/kg	2.9	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
2-Hexanone	Target	20	U	ug/kg	20	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Chlorobenzene	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
Ethylbenzene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
o-Xylene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
m, p-Xylene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Styrene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
Bromoform	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	9.8	U	ug/kg	9.8	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	9.8	UJK	ug/kg	9.8	U	1.0	Yes	S4VEM
Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1-methylethylid	TIC	34	R	ug/kg	34	NJ	1.0	No	NV
Cyclohexene, 1-methyl-4-(1-methylethylid	TIC	9.8	R	ug/kg	9.8	NJ	1.0	No	NV
.gamma.-Terpinene	TIC	33	R	ug/kg	33	NJ	1.0	No	NV
2-Carene	TIC	23	R	ug/kg	23	NJ	1.0	No	NV
Thujone	TIC	27	R	ug/kg	27	NJ	1.0	No	NV
D-Limonene	TIC	9.0	R	ug/kg	9.0	NJ	1.0	No	NV
Unknown-01	TIC	13	R	ug/kg	13	J	1.0	No	NV
.alpha.-Pinene	TIC	12	R	ug/kg	12	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR4	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TA05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:09:00
% Moisture :		% Solids : 62.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Acenaphthylene	Target	0.98	JQ	ug/kg	0.98	J	1.0	Yes	S4VEM
Acenaphthene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Fluorene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Phenanthrene	Target	1.6	JQ	ug/kg	1.6	J	1.0	Yes	S4VEM
Anthracene	Target	2.0	JQ	ug/kg	2.0	J	1.0	Yes	S4VEM
Fluoranthene	Target	2.8	JQ	ug/kg	2.8	J	1.0	Yes	S4VEM
Pyrene	Target	3.2	JQ	ug/kg	3.2	J	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	1.7	JQ	ug/kg	1.7	J	1.0	Yes	S4VEM
Chrysene	Target	3.3	JQ	ug/kg	3.3	J	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	6.8		ug/kg	6.8		1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	2.0	JQ	ug/kg	2.0	J	1.0	Yes	S4VEM
Benzo(a)pyrene	Target	2.4	JQ	ug/kg	2.4	J	1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	2.9	JK	ug/kg	2.9	J	1.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	5.1	U	ug/kg	5.1	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	5.0	JK	ug/kg	5.0	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR9	Method: Aroclors	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM
Aroclor-1221	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM
Aroclor-1232	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM
Aroclor-1242	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM
Aroclor-1248	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM
Aroclor-1254	Target	47	U	ug/kg	1.5	JP	1.0	Yes	S4VEM
Aroclor-1260	Target	1.8	JK	ug/kg	1.8	JP	1.0	Yes	S4VEM
Aroclor-1262	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM
Aroclor-1268	Target	47	U	ug/kg	47	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR9	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Chloromethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Vinyl chloride	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Bromomethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Chloroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Acetone	Target	92		ug/kg	92		1.0	Yes	S4VEM
Carbon disulfide	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Methyl acetate	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Methylene chloride	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
2-Butanone	Target	17	U	ug/kg	17	U	1.0	Yes	S4VEM
Bromochloromethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Chloroform	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Cyclohexane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Benzene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Trichloroethene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	17	UJK	ug/kg	17	U	1.0	Yes	S4VEM
Toluene	Target	3.4	JQ	ug/kg	3.4	J	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
2-Hexanone	Target	17	UJK	ug/kg	17	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Chlorobenzene	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
Ethylbenzene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
o-Xylene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
m, p-Xylene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Styrene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
Bromoform	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	8.6	U	ug/kg	8.6	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	8.6	UJK	ug/kg	8.6	U	1.0	Yes	S4VEM
Furan	TIC	16	R	ug/kg	16	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR9	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Acenaphthylene	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Acenaphthene	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Fluorene	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	5.0	JQ	ug/kg	5.0	J	1.0	Yes	S4VEM
Phenanthrene	Target	2.9	JQ	ug/kg	2.9	J	1.0	Yes	S4VEM
Anthracene	Target	1.3	JQ	ug/kg	1.3	J	1.0	Yes	S4VEM
Fluoranthene	Target	3.4	JQ	ug/kg	3.4	J	1.0	Yes	S4VEM
Pyrene	Target	2.6	JQ	ug/kg	2.6	J	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	1.4	JQ	ug/kg	1.4	J	1.0	Yes	S4VEM
Chrysene	Target	3.3	JQ	ug/kg	3.3	J	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	4.2	JQ	ug/kg	4.2	J	1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	0.97	JQ	ug/kg	0.97	J	1.0	Yes	S4VEM
Benzo(a)pyrene	Target	1.2	JQ	ug/kg	1.2	J	1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	1.3	JK	ug/kg	1.3	J	1.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	2.5	JK	ug/kg	2.5	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR9	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	100	UJK	ug/kg	100	U	1.0	Yes	S4VEM
Benzaldehyde	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Phenol	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2-Methylphenol	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Acetophenone	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
4-Methylphenol	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Hexachloroethane	Target	240	UJK	ug/kg	240	U	1.0	Yes	S4VEM
Nitrobenzene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Isophorone	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Naphthalene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
4-Chloroaniline	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Caprolactam	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Hexachlorocyclo-pentadiene	Target	470	UJK	ug/kg	470	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
3-Nitroaniline	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Acenaphthene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
2,4-Dinitrophenol	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Dibenzofuran	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Diethylphthalate	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Fluorene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
4-Chlorophenyl-phenyl ether	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Atrazine	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	470	R	ug/kg	470	U	1.0	No	S4VEM
Phenanthrene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Anthracene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Carbazole	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Fluoranthene	Target	470	R	ug/kg	470	U	1.0	No	S4VEM
Pyrene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Butylbenzylphthalate	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	470	UJK	ug/kg	470	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Chrysene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Bis(2-ethylhexyl)phthalate	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Di-n-octylphthalate	Target	470	U	ug/kg	470	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Benzo(k)fluoranthene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Benzo(a)pyrene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Indeno(1,2,3-cd)pyrene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
Dibenzo(a,h)anthracene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	240	R	ug/kg	240	U	1.0	No	S4VEM
2,3,4,6-Tetrachlorophenol	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM
Unknown Alkane-04	TIC	260	R	ug/kg	260	J	1.0	No	NV
6-Octadecenoic acid	TIC	390	R	ug/kg	390	NJ	1.0	No	NV
Friedelan-3-one	TIC	320	R	ug/kg	320	NJ	1.0	No	NV
Unknown-06	TIC	130	R	ug/kg	130	J	1.0	No	NV
Behenic alcohol	TIC	250	R	ug/kg	250	NJ	1.0	No	NV
Unknown-08	TIC	110	R	ug/kg	110	J	1.0	No	NV
Methyl dehydroabietate	TIC	160	R	ug/kg	160	NJ	1.0	No	NV
Unknown Alkane-03	TIC	98	R	ug/kg	98	J	1.0	No	NV
Pentadecanoic acid	TIC	110	R	ug/kg	110	NJ	1.0	No	NV
Tetracosanoic acid	TIC	180	R	ug/kg	180	NJ	1.0	No	NV
Unknown Alkane-05	TIC	410	R	ug/kg	410	J	1.0	No	NV
Unknown-09	TIC	130	R	ug/kg	130	J	1.0	No	NV
Unknown-07	TIC	120	R	ug/kg	120	J	1.0	No	NV
Unknown Alkane-06	TIC	260	R	ug/kg	260	J	1.0	No	NV
Ergosta-5,22-dien-3-ol, (3.beta.,22E,24S	TIC	250	R	ug/kg	250	NJ	1.0	No	NV
Unknown-03	TIC	130	R	ug/kg	130	J	1.0	No	NV
Testosterone	TIC	140	R	ug/kg	140	NJ	1.0	No	NV
Stigmast-4-en-3-one	TIC	200	R	ug/kg	200	NJ	1.0	No	NV
.gamma.-Sitosterol	TIC	210	R	ug/kg	210	NJ	1.0	No	NV
cis-Vaccenic acid	TIC	400	R	ug/kg	400	NJ	1.0	No	NV
Unknown-02	TIC	130	R	ug/kg	130	J	1.0	No	NV
Octadecane, 1-iodo-	TIC	200	R	ug/kg	200	NJ	1.0	No	NV
Unknown Aldol Condensate	TIC	410	R	ug/kg	410	AJ	1.0	No	NV
A'-Neogammacer-22(29)-ene	TIC	250	R	ug/kg	250	NJ	1.0	No	NV
trans-1,2-Bis(methyldichlorosilyl)ethyle	TIC	120	R	ug/kg	120	NJ	1.0	No	NV
Unknown-01	TIC	250	R	ug/kg	250	J	1.0	No	NV
Hexadecenoic acid, Z-11-	TIC	170	R	ug/kg	170	NJ	1.0	No	NV
Campesterol	TIC	280	R	ug/kg	280	NJ	1.0	No	NV
Unknown Alkane-02	TIC	190	R	ug/kg	190	J	1.0	No	NV
Desmosterol	TIC	100	R	ug/kg	100	NJ	1.0	No	NV
cis-9-Hexadecenoic acid	TIC	190	R	ug/kg	190	NJ	1.0	No	NV
Unknown-04	TIC	110	R	ug/kg	110	J	1.0	No	NV
26-Nor-5-cholesten-3.beta.-ol- 25-one	TIC	770	R	ug/kg	770	NJ	1.0	No	NV

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Squalene	TIC	130	R	ug/kg	130	NJ	1.0	No	NV
6-Methoxy-9H-purine	TIC	440	R	ug/kg	440	NJ	1.0	No	NV
Unknown Alkane-01	TIC	310	R	ug/kg	310	J	1.0	No	NV
Unknown-05	TIC	280	R	ug/kg	280	J	1.0	No	NV
Docosanoic acid	TIC	200	R	ug/kg	200	NJ	1.0	No	NV
Tridecanoic acid	TIC	510	R	ug/kg	510	NJ	1.0	No	NV
Octadecanoic acid	TIC	320	R	ug/kg	320	NJ	1.0	No	NV
Stigmasterol	TIC	310	R	ug/kg	310	NJ	1.0	No	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: JHFR9	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 69.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
beta-BHC	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
delta-BHC	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Heptachlor	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Aldrin	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Endosulfan I	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Dieldrin	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
4,4'-DDE	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Endrin	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Endosulfan II	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
4,4'-DDD	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
4,4'-DDT	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Methoxychlor	Target	24	U	ug/kg	24	U	1.0	Yes	S4VEM
Endrin ketone	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	4.7	U	ug/kg	4.7	U	1.0	Yes	S4VEM
cis-Chlordane	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
trans-Chlordane	Target	2.4	U	ug/kg	2.4	U	1.0	Yes	S4VEM
Toxaphene	Target	240	U	ug/kg	240	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: PBLK90	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
beta-BHC	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
delta-BHC	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Heptachlor	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Aldrin	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Heptachlor epoxide	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Endosulfan I	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Dieldrin	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
4,4'-DDE	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Endrin	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Endosulfan II	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
4,4'-DDD	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Endosulfan sulfate	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
4,4'-DDT	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Methoxychlor	Target	17	U	ug/kg	17	U	1.0	Yes	S4VEM
Endrin ketone	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
cis-Chlordane	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
trans-Chlordane	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Toxaphene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: PLCS90	Method: Pesticides	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
beta-BHC	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
delta-BHC	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
gamma-BHC (Lindane)	Spike	1.3	J	ug/kg	1.3	J	1.0	Yes	S4VEM
Heptachlor	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Aldrin	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Heptachlor epoxide	Spike	1.4	J	ug/kg	1.4	J	1.0	Yes	S4VEM
Endosulfan I	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
Dieldrin	Spike	2.7	J	ug/kg	2.7	J	1.0	Yes	S4VEM
4,4'-DDE	Spike	2.7	J	ug/kg	2.7	J	1.0	Yes	S4VEM
Endrin	Spike	3.1	J	ug/kg	3.1	J	1.0	Yes	S4VEM
Endosulfan II	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
4,4'-DDD	Target	0.015	JP	ug/kg	0.015	JP	1.0	Yes	S4VEM
Endosulfan sulfate	Spike	2.3	J	ug/kg	2.3	J	1.0	Yes	S4VEM
4,4'-DDT	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Methoxychlor	Target	17	U	ug/kg	17	U	1.0	Yes	S4VEM
Endrin ketone	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Endrin aldehyde	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
cis-Chlordane	Target	1.7	U	ug/kg	1.7	U	1.0	Yes	S4VEM
trans-Chlordane	Spike	1.2	J	ug/kg	1.2	J	1.0	Yes	S4VEM
Toxaphene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: SBLK37	Method: Semivolatiles	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	70	U	ug/kg	70	U	1.0	Yes	S4VEM
Benzaldehyde	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Phenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Bis(2-Chloroethyl) ether	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
2-Chlorophenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2-Methylphenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Acetophenone	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
4-Methylphenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
N-Nitroso-di-n propylamine	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Hexachloroethane	Target	170	UJ	ug/kg	170	U	1.0	Yes	S4VEM
Nitrobenzene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Isophorone	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2-Nitrophenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2,4-Dimethylphenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Bis(2-chloroethoxy)methane	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2,4-Dichlorophenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Naphthalene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
4-Chloroaniline	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Hexachlorobutadiene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Caprolactam	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
4-Chloro-3-methylphenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Hexachlorocyclo-pentadiene	Target	330	UJ	ug/kg	330	U	1.0	Yes	S4VEM
2,4,6-Trichlorophenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2,4,5-Trichlorophenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
1,1'-Biphenyl	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2-Chloronaphthalene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2-Nitroaniline	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Dimethylphthalate	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2,6-Dinitrotoluene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Acenaphthylene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
3-Nitroaniline	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Acenaphthene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2,4-Dinitrophenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
4-Nitrophenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Dibenzofuran	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
2,4-Dinitrotoluene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Diethylphthalate	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Fluorene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
4-Chlorophenyl-phenyl ether	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
4-Nitroaniline	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
4,6-Dinitro-2-methylphenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
N-Nitrosodiphenylamine	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
4-Bromophenyl-phenylether	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Hexachlorobenzene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Atrazine	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Phenanthrene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Anthracene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Carbazole	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Di-n-butylphthalate	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Fluoranthene	Target	330	U	ug/kg	330	U	1.0	Yes	S4VEM
Pyrene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Butylbenzylphthalate	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
3,3'-Dichlorobenzidine	Target	330	UJ	ug/kg	330	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Chrysene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Di-n-octylphthalate	Target	330	UJ	ug/kg	330	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Benzo(a)pyrene	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	170	UJ	ug/kg	170	U	1.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	170	UJ	ug/kg	170	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzo(g,h,i)perylene	Target	170	UJ	ug/kg	170	U	1.0	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	Target	170	U	ug/kg	170	U	1.0	Yes	S4VEM
Unknown-02	TIC	79	J	ug/kg	79	J	1.0	Yes	NV
Unknown Alkane-02	TIC	170	J	ug/kg	170	J	1.0	Yes	NV
Unknown Alkane-01	TIC	170	J	ug/kg	170	J	1.0	Yes	NV
Unknown Aldol Condensate	TIC	280	AJ	ug/kg	280	AJ	1.0	Yes	NV
Unknown-01	TIC	90	J	ug/kg	90	J	1.0	Yes	NV
Unknown-03	TIC	110	J	ug/kg	110	J	1.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: SBLK39	Method: Semivolatiles by SIM	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Naphthalene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
2-Methylnaphthalene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Acenaphthylene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Acenaphthene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Fluorene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Pentachlorophenol	Target	6.7	U	ug/kg	6.7	U	1.0	Yes	S4VEM
Phenanthrene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Benzo(a)anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Chrysene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Benzo(b)fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Benzo(k)fluoranthene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Benzo(a)pyrene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	Target	3.3	UJ	ug/kg	3.3	U	1.0	Yes	S4VEM
Dibenzo(a,h)anthracene	Target	3.3	U	ug/kg	3.3	U	1.0	Yes	S4VEM
Benzo(g,h,i)perylene	Target	3.3	UJ	ug/kg	3.3	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: VBLKOO	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
o-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
m, p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Unknown-01	TIC	13	J	ug/kg	13	J	1.0	Yes	NV
Unknown-02	TIC	21	J	ug/kg	21	J	1.0	Yes	NV
Acetic acid, 2-ethylhexyl ester	TIC	14	NJ	ug/kg	14	NJ	1.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: VBLKQA	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.0	UJ	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
o-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
m, p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Acetic acid, 2-ethylhexyl ester	TIC	9.0	NJ	ug/kg	9.0	NJ	1.0	Yes	NV
Unknown-01	TIC	75	J	ug/kg	75	J	1.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: VBLKQC	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Chloromethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Vinyl chloride	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Bromomethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Chloroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Acetone	Target	500	U	ug/kg	500	U	1.0	Yes	S4VEM
Carbon disulfide	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Methyl acetate	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Methylene chloride	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Butanone	Target	500	U	ug/kg	500	U	1.0	Yes	S4VEM
Bromochloromethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Chloroform	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Cyclohexane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Benzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Trichloroethene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	500	U	ug/kg	500	U	1.0	Yes	S4VEM
Toluene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
2-Hexanone	Target	500	U	ug/kg	500	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Chlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Ethylbenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
o-Xylene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
m, p-Xylene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Styrene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Bromoform	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	250	U	ug/kg	250	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQI
Sample Number: VBLKQL	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Acetone	Target	8.0	J	ug/kg	8.0	J	1.0	Yes	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.0	UJ	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.0	UJ	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Hexanone	Target	6.7	J	ug/kg	6.7	J	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
o-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
m, p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Unknown-01	TIC	6.5	J	ug/kg	6.5	J	1.0	Yes	NV
Acetic acid, 2-ethylhexyl ester	TIC	5.7	NJ	ug/kg	5.7	NJ	1.0	Yes	NV

Case No: 46026	Contract: EPW14035	SDG No: JHFR0	Lab Code: EQ1
Sample Number: VHBLK01	Method: Volatile Organics	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Vinyl chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromomethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloro-1,2,2-Trifluoroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Acetone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Carbon disulfide	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl acetate	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylene chloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methyl tert-butyl ether	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1-Dichloroethane	Target	5.0	UJ	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Butanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Bromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chloroform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Cyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Benzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Trichloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Methylcyclohexane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichloropropane	Target	5.0	UJ	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromodichloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Toluene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
trans-1,3-Dichloropropene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Tetrachloroethene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
2-Hexanone	Target	10	U	ug/kg	10	U	1.0	Yes	S4VEM
Dibromochloromethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Chlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Ethylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
o-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
m, p-Xylene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Styrene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Bromoform	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Isopropylbenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,4-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/kg	5.0	U	1.0	Yes	S4VEM
Acetic acid, 2-ethylhexyl ester	TIC	8.0	NJB	ug/kg	8.0	NJB	1.0	Yes	NV
Unknown-01	TIC	6.7	JB	ug/kg	6.7	JB	1.0	Yes	NV
Unknown-02	TIC	22	J	ug/kg	22	J	1.0	Yes	NV
Unknown-03	TIC	13	J	ug/kg	13	J	1.0	Yes	NV

Data Validation Report

Analytical Sample Listing

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Method - Volatile Organics

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHF10	FS	Soil	Low	02/25/2016 14:15:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 16:33:00	Initial	03/02/2016 16:33:00	DB-624	Agilent_MSD5
								Purge_and_Trap	03/03/2016 12:57:00	Reinjection-01	03/03/2016 12:57:00	DB-624	Agilent_MSD5
JHF11	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 20:18:00	Initial	03/02/2016 20:18:00	DB-624	Agilent_MSD5
								Purge_and_Trap	03/03/2016 13:19:00	Reinjection-01	03/03/2016 13:19:00	DB-624	Agilent_MSD5
								Purge_and_Trap	03/03/2016 15:33:00	Reinjection-01	03/03/2016 15:33:00	DB-624	Agilent_MSD5
JHF12	FS	Soil	Low	02/25/2016 15:24:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 16:55:00	Initial	03/02/2016 16:55:00	DB-624	Agilent_MSD5
JHF13	FS	Soil	Low	02/25/2016 15:42:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 17:17:00	Initial	03/02/2016 17:17:00	DB-624	Agilent_MSD5
								Purge_and_Trap	03/03/2016 15:55:00	Reinjection-01	03/03/2016 15:55:00	DB-624	Agilent_MSD5
JHF14	FS	Soil	Low	02/25/2016 16:03:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 17:40:00	Initial	03/02/2016 17:40:00	DB-624	Agilent_MSD5
								Purge_and_Trap	03/03/2016 13:42:00	Reinjection-01	03/03/2016 13:42:00	DB-624	Agilent_MSD5
JHF15	FS	Soil	Low	02/25/2016 15:55:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 18:02:00	Initial	03/02/2016 18:02:00	DB-624	Agilent_MSD5
JHF16	FS	Soil	Low	02/25/2016 16:50:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 18:25:00	Initial	03/02/2016 18:25:00	DB-624	Agilent_MSD5
								Purge_and_Trap	03/03/2016 14:04:00	Reinjection-01	03/03/2016 14:04:00	DB-624	Agilent_MSD5
JHFR0	FS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 15:02:00	Initial	03/02/2016 15:02:00	DB-624	Agilent_MSD5
JHFR0ME	FS	Soil	Medium	02/25/2016 12:59:00	03/01/2016 10:00:00			Purge_and_Trap	03/09/2016 12:09:00	Initial	03/09/2016 12:09:00	DB-624	Agilent_MSD5
JHFR0MEMS	MS	Soil	Medium	02/25/2016 12:59:00	03/01/2016 10:00:00			Purge_and_Trap	03/09/2016 12:48:00	Initial	03/09/2016 12:48:00	DB-624	Agilent_MSD5
JHFR0MEMSD	MSD	Soil	Medium	02/25/2016 12:59:00	03/01/2016 10:00:00			Purge_and_Trap	03/09/2016 13:10:00	Initial	03/09/2016 13:10:00	DB-624	Agilent_MSD5
JHFR0MS	MS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 15:25:00	Initial	03/02/2016 15:25:00	DB-624	Agilent_MSD5
JHFR0MSD	MSD	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 15:48:00	Initial	03/02/2016 15:48:00	DB-624	Agilent_MSD5

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHFR1	FS	Soil	Low	02/25/2016 14:13:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 16:10:00	Initial	03/02/2016 16:10:00	DB-624	Agilent__MSD5
JHFR1ME	FS	Soil	Medium	02/25/2016 14:13:00	03/01/2016 10:00:00			Purge_and_Trap	03/09/2016 11:47:00	Initial	03/09/2016 11:47:00	DB-624	Agilent__MSD5
JHFR2	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Purge_and_Trap	03/03/2016 14:27:00	Reinjection-01	03/03/2016 14:27:00	DB-624	Agilent__MSD5
								Purge_and_Trap	03/02/2016 18:47:00	Initial	03/02/2016 18:47:00	DB-624	Agilent__MSD5
JHFR3	FS	Soil	Low	02/25/2016 15:34:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 19:10:00	Initial	03/02/2016 19:10:00	DB-624	Agilent__MSD5
JHFR4	FS	Soil	Low	02/25/2016 16:09:00	03/01/2016 10:00:00			Purge_and_Trap	03/02/2016 19:32:00	Initial	03/02/2016 19:32:00	DB-624	Agilent__MSD5
								Purge_and_Trap	03/03/2016 14:49:00	Reinjection-01	03/03/2016 14:49:00	DB-624	Agilent__MSD5
JHFR9	FS	Soil	Low	02/25/2016 16:47:00	03/01/2016 10:00:00			Purge_and_Trap	03/03/2016 15:11:00	Reinjection-01	03/03/2016 15:11:00	DB-624	Agilent__MSD5
								Purge_and_Trap	03/02/2016 19:55:00	Initial	03/02/2016 19:55:00	DB-624	Agilent__MSD5

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI	SDG: JHFR0	Contract: EPW14035	Submission Group Id: 30133895
Lab Name: Shealy Environmental Services, Inc.	Case: 46026	Client: EPA Region 10	SOW: SOM02.3

Method - Semivolatiles

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHF10	FS	Soil	Low	02/25/2016 14:15:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 14:02:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 14:55:00	Zebron ZB-SV	Agilent__MSD4
JHF11	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 12:39:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 11:13:00	Zebron ZB-SV	Agilent__MSD4
JHF12	FS	Soil	Low	02/25/2016 15:24:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 15:22:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 14:28:00	Zebron ZB-SV	Agilent__MSD4
JHF13	FS	Soil	Low	02/25/2016 15:42:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 15:49:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 14:55:00	Zebron ZB-SV	Agilent__MSD4
JHF14	FS	Soil	Low	02/25/2016 16:03:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 17:38:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 16:43:00	Zebron ZB-SV	Agilent__MSD4
JHF15	FS	Soil	Low	02/25/2016 15:55:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 13:06:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 11:40:00	Zebron ZB-SV	Agilent__MSD4
JHF16	FS	Soil	Low	02/25/2016 16:50:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 17:09:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 18:05:00	Zebron ZB-SV	Agilent__MSD4
JHFR0	FS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 16:16:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 15:22:00	Zebron ZB-SV	Agilent__MSD4
JHFROMS	MS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 15:49:00	Zebron ZB-SV	Agilent__MSD4
JHFROMSD	MSD	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 16:16:00	Zebron ZB-SV	Agilent__MSD4
JHFR1	FS	Soil	Low	02/25/2016	03/01/2016			Sonication	03/02/2016	Initial	03/09/2016	Zebron	Agilent__MSD4

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
				14:13:00	10:00:00				11:27:00		13:35:00	ZB-SV	
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 14:28:00	Zebron ZB-SV	Agilent__MSD4
JHFR2	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 12:07:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 13:33:00	Zebron ZB-SV	Agilent__MSD4
JHFR3	FS	Soil	Low	02/25/2016 15:34:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 12:34:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 14:00:00	Zebron ZB-SV	Agilent__MSD4
JHFR4	FS	Soil	Low	02/25/2016 16:09:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/09/2016 10:19:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 11:45:00	Zebron ZB-SV	Agilent__MSD4
JHFR9	FS	Soil	Low	02/25/2016 16:47:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Reinjection-01	03/15/2016 12:12:00	Zebron ZB-SV	Agilent__MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/09/2016 10:46:00	Zebron ZB-SV	Agilent__MSD4

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Method - Semivolatiles by SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHF10	FS	Soil	Low	02/25/2016 14:15:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 13:05:00	Zebron ZB-SV	Agilent_MSD4
JHF11	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 10:58:00	Zebron ZB-SV	Agilent_MSD4
JHF12	FS	Soil	Low	02/25/2016 15:24:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 13:31:00	Zebron ZB-SV	Agilent_MSD4
JHF13	FS	Soil	Low	02/25/2016 15:42:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 13:56:00	Zebron ZB-SV	Agilent_MSD4
								Sonication	03/02/2016 11:27:00	Dilution-01	03/14/2016 11:22:00	Zebron ZB-SV	Agilent_MSD4
JHF14	FS	Soil	Low	02/25/2016 16:03:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 15:38:00	Zebron ZB-SV	Agilent_MSD4
								Sonication	03/02/2016 11:27:00	Dilution-01	03/14/2016 13:13:00	Zebron ZB-SV	Agilent_MSD4
JHF15	FS	Soil	Low	02/25/2016 15:55:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 11:23:00	Zebron ZB-SV	Agilent_MSD4
JHF16	FS	Soil	Low	02/25/2016 16:50:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 16:03:00	Zebron ZB-SV	Agilent_MSD4
								Sonication	03/02/2016 11:27:00	Reinjection-01	03/14/2016 12:40:00	Zebron ZB-SV	Agilent_MSD4
JHFR0	FS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 14:22:00	Zebron ZB-SV	Agilent_MSD4
JHFR0MS	MS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 14:47:00	Zebron ZB-SV	Agilent_MSD4
JHFR0MSD	MSD	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 15:13:00	Zebron ZB-SV	Agilent_MSD4
JHFR1	FS	Soil	Low	02/25/2016 14:13:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 12:40:00	Zebron ZB-SV	Agilent_MSD4
JHFR2	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Dilution-01	03/14/2016 10:31:00	Zebron ZB-SV	Agilent_MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/10/2016 11:49:00	Zebron ZB-SV	Agilent_MSD4
JHFR3	FS	Soil	Low	02/25/2016 15:34:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Dilution-01	03/14/2016 12:14:00	Zebron ZB-SV	Agilent_MSD4
								Sonication	03/02/2016 11:27:00	Initial	03/10/2016 12:14:00	Zebron ZB-SV	Agilent_MSD4
JHFR4	FS	Soil	Low	02/25/2016	03/01/2016			Sonication	03/02/2016	Initial	03/10/2016	Zebron	Agilent_MSD4

Data Validation Report

Analytical Sample Listing

Page 6

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
				16:09:00	10:00:00				11:27:00		10:07:00	ZB-SV	
JHFR9	FS	Soil	Low	02/25/2016 16:47:00	03/01/2016 10:00:00			Sonication	03/02/2016 11:27:00	Initial	03/10/2016 10:32:00	Zebron ZB-SV	Agilent__MSD4

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI	SDG: JHFR0	Contract: EPW14035	Submission Group Id: 30133895
Lab Name: Shealy Environmental Services, Inc.	Case: 46026	Client: EPA Region 10	SOW: SOM02.3

Method - Pesticides

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHF10	FS	Soil	Low	02/25/2016 14:15:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 10:01:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 10:01:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:51:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:51:00	DB-35MS	Agilent_GC5
JHF11	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 10:28:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 10:28:00	DB-XLB	Agilent_GC5
JHF12	FS	Soil	Low	02/25/2016 15:24:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 18:07:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 18:07:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 10:16:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 10:16:00	DB-35MS	Agilent_GC5
JHF13	FS	Soil	Low	02/25/2016 15:42:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 15:47:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 15:47:00	DB-35MS	Agilent_GC5
JHF14	FS	Soil	Low	02/25/2016 16:03:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 16:03:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 16:03:00	DB-35MS	Agilent_GC5
JHF15	FS	Soil	Low	02/25/2016 15:55:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 10:43:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 10:43:00	DB-35MS	Agilent_GC5
JHF16	FS	Soil	Low	02/25/2016 16:50:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 18:22:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:55:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016	Reinjection-	03/09/2016	DB-XLB	Agilent_GC5

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
								Sonication	12:10:00 03/04/2016 12:10:00	01 Initial	17:55:00 03/08/2016 18:22:00	DB-XLB	Agilent_GC5
JHFR0	FS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:05:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:09:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:09:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:05:00	DB-35MS	Agilent_GC5
JHFR0MS	MS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:24:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:20:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:20:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:24:00	DB-35MS	Agilent_GC5
JHFR0MSD	MSD	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:40:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:36:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Reinjection-01	03/09/2016 17:40:00	DB-XLB	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 17:36:00	DB-XLB	Agilent_GC5
JHFR1	FS	Soil	Low	02/25/2016 14:13:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 15:32:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 15:32:00	DB-XLB	Agilent_GC5
JHFR2	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 10:59:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 10:59:00	DB-XLB	Agilent_GC5
JHFR3	FS	Soil	Low	02/25/2016 15:34:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 16:18:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 16:18:00	DB-XLB	Agilent_GC5
JHFR4	FS	Soil	Low	02/25/2016 16:09:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 11:14:00	DB-35MS	Agilent_GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 11:14:00	DB-XLB	Agilent_GC5

Data Validation Report

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Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHFR9	FS	Soil	Low	02/25/2016 16:47:00	03/01/2016 10:00:00			Sonication	03/04/2016 12:10:00	Initial	03/08/2016 11:30:00	DB-35MS	Agilent__GC5
								Sonication	03/04/2016 12:10:00	Initial	03/08/2016 11:30:00	DB-XLB	Agilent__GC5

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Method - Aroclors

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
JHF10	FS	Soil	Low	02/25/2016 14:15:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/07/2016 23:15:00	DB-35MS	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 23:15:00	DB-XLB	Agilent_GC11
JHF11	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/07/2016 23:31:00	DB-35MS	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 23:31:00	DB-XLB	Agilent_GC11
JHF12	FS	Soil	Low	02/25/2016 15:24:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/07/2016 23:46:00	DB-35MS	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 23:46:00	DB-XLB	Agilent_GC11
JHF13	FS	Soil	Low	02/25/2016 15:42:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:01:00	DB-XLB	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:01:00	DB-35MS	Agilent_GC11
JHF14	FS	Soil	Low	02/25/2016 16:03:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:17:00	DB-XLB	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:17:00	DB-35MS	Agilent_GC11
JHF15	FS	Soil	Low	02/25/2016 15:55:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:32:00	DB-35MS	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:32:00	DB-XLB	Agilent_GC11
JHF16	FS	Soil	Low	02/25/2016 16:50:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:48:00	DB-35MS	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 00:48:00	DB-XLB	Agilent_GC11
JHFR0	FS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:13:00	DB-XLB	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:13:00	DB-35MS	Agilent_GC11
JHFR0MS	MS	Soil	Low	02/25/2016 12:59:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:29:00	DB-35MS	Agilent_GC11
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:29:00	DB-XLB	Agilent_GC11
JHFR0MSD	MSD	Soil	Low	02/25/2016	03/01/2016			Sonication	03/02/2016	Initial	03/07/2016	DB-XLB	Agilent_GC11

Data Validation Report

Analytical Sample Listing

Tue, 22 Mar 2016 09:35:44

Lab Code: EQI

SDG: JHFR0

Contract: EPW14035

Submission Group Id: 30133895

Lab Name: Shealy Environmental Services, Inc.

Case: 46026

Client: EPA Region 10

SOW: SOM02.3

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Handling Type	Handling Date	Preparation Type	Preparation Date	Analysis Type	Analysis Date	Column	Instrument
				12:59:00	10:00:00				21:11:00		22:44:00		
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:44:00	DB-35MS	Agilent__GC11
JHFR1	FS	Soil	Low	02/25/2016 14:13:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:59:00	DB-XLB	Agilent__GC11
								Sonication	03/02/2016 21:11:00	Initial	03/07/2016 22:59:00	DB-35MS	Agilent__GC11
JHFR2	FS	Soil	Low	02/25/2016 14:57:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:03:00	DB-XLB	Agilent__GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:03:00	DB-35MS	Agilent__GC11
JHFR3	FS	Soil	Low	02/25/2016 15:34:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:19:00	DB-XLB	Agilent__GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:19:00	DB-35MS	Agilent__GC11
JHFR4	FS	Soil	Low	02/25/2016 16:09:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:34:00	DB-35MS	Agilent__GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:34:00	DB-XLB	Agilent__GC11
JHFR9	FS	Soil	Low	02/25/2016 16:47:00	03/01/2016 10:00:00			Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:50:00	DB-35MS	Agilent__GC11
								Sonication	03/02/2016 21:11:00	Initial	03/08/2016 01:50:00	DB-XLB	Agilent__GC11

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Edit History Report

Case No: 46026Contract: EPW14035SDG No: JHFR0Lab Code: EQI

Method: Semivolatiles

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	3,3'-Dichlorobenzidine	Validation Flag	U	UJK	Raymond Wu	4/20/16 3:36 PM	
JHF10	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJK	U	Raymond Wu	4/20/16 2:39 PM	
JHF10	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	4-Chloroaniline	Validation Flag	UJ	UJK	Raymond Wu	4/19/16 2:50 PM	
JHF10	Soil	9-Octadecenoic acid, (E)-	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	9-Octadecenoic acid, (E)-	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Anthracene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(b)fluoranthene	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(g,h,i)perylene	Validation Flag	UJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Bis(2-ethylhexyl)phthalate	Validation Flag	J	JQ	Raymond Wu	4/19/16 2:52 PM	
JHF10	Soil	Cholestane	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Cholestane	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Di-n-butylphthalate	Validation Flag	J	JQ	Raymond Wu	4/19/16 2:52 PM	
JHF10	Soil	Di-n-octylphthalate	Validation Flag	UJK	U	Raymond Wu	4/20/16 2:52 PM	
JHF10	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 12:40 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Fluorene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Heptadecane	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Heptadecane	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Hexachlorocyclopentadiene	Validation Flag	R	UJK	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Hexachloroethane	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Phenanthrene	Validation Flag	U	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Pyrene	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Pyrene	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown Alkane-02	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown Alkane-02	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown Alkane-03	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown Alkane-03	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-03	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-03	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-04	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-05	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-05	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-06	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-06	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-07	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-07	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-08	Reportable	Y	N	Raymond	4/12/16 12:40 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil	Unknown-08	Reportable	Y	N	Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-08	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-09	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-10	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-10	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-11	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-11	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-12	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-12	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-13	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-13	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-14	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-14	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-15	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-15	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-16	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-16	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-17	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	Unknown-17	Validation Flag	J	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	cis-Vaccenic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	cis-Vaccenic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	n-Hexadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:40 PM	
JHF10	Soil	n-Hexadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:40 PM	
JHF11	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil	.alpha.-Amyrin	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	.alpha.-Amyrin	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	.beta.-Sitosterol	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	.beta.-Sitosterol	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	.beta.-iso-Methyl ionone	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	.beta.-iso-Methyl ionone	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	1,4-Dimethyl-8-isopropylidenetricyclo[5.	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	1,4-Dimethyl-8-isopropylidenetricyclo[5.	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 1:01 PM	
JHF11	Soil	1-Heneicosanol	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	1-Heneicosanol	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:01 PM	
JHF11	Soil	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	Reportable	Y	N	Raymond	4/12/16 12:46 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF11	Soil	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	Reportable	Y	N	Wu	4/12/16 12:46 PM	
JHF11	Soil	2,2,4a,6a,8a,9,12b,14a-Octamethyl-1,2,3,	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2-Heptacosanone	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2-Heptacosanone	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2-Pentacosanone	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	2-Pentacosanone	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:01 PM	
JHF11	Soil	4,4,6a,6b,8a,11,12,14b-Octamethyl-1,4,4a	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	4,4,6a,6b,8a,11,12,14b-Octamethyl-1,4,4a	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	5.beta.-Pregn-11-ene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	5.beta.-Pregn-11-ene	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	9-Octadecenoic acid, (E)-	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	9-Octadecenoic acid, (E)-	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	A'-Neogammacer-22(29)-ene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	A'-Neogammacer-22(29)-ene	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Anthracene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(g,h,i)perylene	Validation Flag	UJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Di-n-octylphthalate	Validation Flag	U	UJK	Raymond Wu	4/20/16 3:58 PM	
JHF11	Soil	Di-n-octylphthalate	Validation Flag	UJK	U	Raymond Wu	4/20/16 3:53 PM	
JHF11	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:01 PM	
JHF11	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Docosanoic acid	Reportable	Y	N	Raymond	4/12/16 12:46 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF11	Soil	Docosanoic acid	Reportable	Y	N	Wu	4/12/16 12:46 PM	
JHF11	Soil	Docosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Dronabinol	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Dronabinol	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Eicosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Eicosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Fluorene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Hexachlorocyclopentadiene	Validation Flag	R	UJK	Raymond Wu	4/12/16 1:01 PM	
JHF11	Soil	Hexachloroethane	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:01 PM	
JHF11	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Lanosta-8,24-dien-3-ol, acetate, (3.beta	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Lanosta-8,24-dien-3-ol, acetate, (3.beta	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Methyl dehydroabietate	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Methyl dehydroabietate	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Octadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Octadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Olean-12-ene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Olean-12-ene	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Oleic Acid	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Oleic Acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Phenanthrene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Pyrene	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Stigmast-4-en-3-one	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Stigmast-4-en-3-one	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Sulfurous acid, octadecyl 2-propyl ester	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Sulfurous acid, octadecyl 2-propyl ester	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Tetracosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Tetracosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown Aldol Condensate	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown Aldol Condensate	Validation Flag	AJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond	4/12/16 12:46 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF11	Soil	Unknown Alkane-01	Reportable	Y	N	Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown Alkane-02	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown Alkane-02	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-03	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-03	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
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JHF11	Soil	Unknown-05	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-05	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-06	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-06	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-07	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-07	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-08	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-08	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
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JHF11	Soil	Unknown-13	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	Unknown-13	Validation Flag	J	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	cis-9-Hexadecenoic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	cis-9-Hexadecenoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	n-Hexadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 12:46 PM	
JHF11	Soil	n-Hexadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 12:46 PM	
JHF12	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	3,3'-Dichlorobenzidine	Validation	UJ	UJK	Raymond	4/12/16 1:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF12	Soil	3,3'-Dichlorobenzidine	Flag	UJ	UJK	Wu	4/12/16 1:17 PM	
JHF12	Soil	3-Bromobenzyl alcohol, trimethylsilyl et	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	3-Bromobenzyl alcohol, trimethylsilyl et	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	4-Chloroaniline	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(g,h,i)perylene	Validation Flag	UJ	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Bis(2-ethylhexyl)phthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Butylbenzylphthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Di-n-butylphthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
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JHF12	Soil	Fluorene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
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JHF12	Soil	Hexachlorocyclopentadiene	Validation Flag	R	UJK	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Hexachloroethane	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:17 PM	
JHF12	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 1:08 PM	
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JHF12	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Phenanthrene	Reportable	Y	N	Raymond	4/12/16 1:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF12	Soil	Phenanthrene	Reportable	Y	N	Wu	4/12/16 1:08 PM	
JHF12	Soil	Phenanthrene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Pyrene	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 1:08 PM	
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JHF12	Soil	Unknown-17	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-17	Validation Flag	J	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-18	Reportable	Y	N	Raymond	4/12/16 1:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF12	Soil	Unknown-19	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-19	Validation Flag	J	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-20	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-20	Validation Flag	J	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-21	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
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JHF12	Soil	Unknown-22	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
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JHF12	Soil	Unknown-27	Validation Flag	J	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-28	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	Unknown-28	Validation Flag	J	R	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	n-Hexadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 1:08 PM	
JHF12	Soil	n-Hexadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:08 PM	
JHF13	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	11H-Benzo[b]fluorene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	11H-Benzo[b]fluorene	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	17-Norkaur-15-ene, 13-methyl-, (8.beta.,	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	17-Norkaur-15-ene, 13-methyl-, (8.beta.,	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	2,4-Dinitrophenol	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	2-Nitroaniline	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	3-Nitroaniline	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	4-Chloroaniline	Validation	UJ	U	Raymond	4/12/16 1:34 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF13	Soil	4-Chloroaniline	Flag	UJ	U	Wu	4/12/16 1:34 PM	
JHF13	Soil	4-Nitroaniline	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	4-Nitrophenol	Validation Flag	UJ	U	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	7-Isopropyl-1,1,4a-trimethyl-1,2,3,4,4a,	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	7-Isopropyl-1,1,4a-trimethyl-1,2,3,4,4a,	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	9-Octadecenoic acid, (E)-	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	9-Octadecenoic acid, (E)-	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Benzo(k)fluoranthene	Validation Flag	J	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Bis(2-ethylhexyl)phthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	Cholestane	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Dehydroabietic acid	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Di-n-butylphthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Hexachlorocyclopentadiene	Validation	R	UJK	Raymond	4/12/16 1:34 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF13	Soil	Hexachloroethane	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 1:34 PM	
JHF13	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Octadecane, 1-iodo-	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Octadecane, 1-iodo-	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Unknown-06	Validation Flag	J	R	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Unknown-07	Reportable	Y	N	Raymond	4/12/16 1:26 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF13	Soil	Unknown-08	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	Unknown-17	Reportable	Y	N	Raymond Wu	4/12/16 1:26 PM	
JHF13	Soil	Unknown-17	Validation Flag	J	R	Raymond Wu	4/12/16 1:26 PM	
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JHF13	Soil	n-Hexadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:26 PM	
JHF14	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 2:11 PM	
JHF14	Soil	1-Chloroeicosane	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	1-Chloroeicosane	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 2:11 PM	
JHF14	Soil	2-Bromo dodecane	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 2:11 PM	
JHF14	Soil	4-Chloroaniline	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 2:11 PM	
JHF14	Soil	4-Methylphenol	Validation Flag	J	JQ	Raymond Wu	4/12/16 2:18 PM	
JHF14	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Acenaphthene	Validation	U	R	Raymond	4/12/16 1:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF14	Soil	Acenaphthene	Flag	U	R	Wu	4/12/16 1:43 PM	
JHF14	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	Benzene, 1,2,3,4-tetramethyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(a)anthracene	Validation Flag	J	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(a)pyrene	Validation Flag	J	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(b)fluoranthene	Validation Flag	J	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(g,h,i)perylene	Validation Flag	UJ	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	Octadecane, 1-iodo-	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF14	Soil	Phenanthrene	Flag	J	R	Wu	4/12/16 1:43 PM	
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JHF14	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/12/16 1:43 PM	
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JHF14	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF14	Soil	Unknown-18	Validation Flag	J	R	Raymond Wu	4/12/16 1:43 PM	
JHF14	Soil	n-Hexadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 1:43 PM	
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JHF15	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
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JHF15	Soil	1-Propene, 3-(2-cyclopentenyl)-2-methyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 2:39 PM	
JHF15	Soil	2,3,4,6-Tetrachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 2:29 PM	
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JHF15	Soil	Benzo(a)pyrene	Validation	J	R	Raymond	4/12/16 2:29 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF15	Soil	Benzo(b)fluoranthene	Validation Flag	J	R	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	Benzo(g,h,i)perylene	Validation Flag	UJ	R	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	Bis(2-ethylhexyl)phthalate	Validation Flag	J	JQ	Raymond Wu	4/21/16 3:25 PM	
JHF15	Soil	Butylbenzylphthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 2:39 PM	
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JHF15	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 2:29 PM	
JHF15	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 2:29 PM	
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JHF15	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/12/16 2:29 PM	
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF15	Soil	Unknown-23	Validation Flag	J	R	Raymond Wu	4/12/16 2:29 PM	
JHF16	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil		Validation		S4VEM	Raymond	4/7/16 6:01 PM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF16	Soil	(-)-Isolongifolol, methyl ether	Validation Flag	NJ	R	Raymond Wu	4/12/16 2:48 PM	
JHF16	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 3:02 PM	
JHF16	Soil	15-Isobutyl-(13.alpha.H)-isocopalane	Reportable	Y	N	Raymond Wu	4/12/16 2:48 PM	
JHF16	Soil	15-Isobutyl-(13.alpha.H)-isocopalane	Validation Flag	NJ	R	Raymond Wu	4/12/16 2:48 PM	
JHF16	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 3:02 PM	
JHF16	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 2:48 PM	
JHF16	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 2:48 PM	
JHF16	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 3:02 PM	
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JHF16	Soil	Hexachlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 3:02 PM	
JHF16	Soil	Hexachlorocyclopentadiene	Validation	R	UJK	Raymond	4/12/16 3:02 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHF16	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 2:48 PM	
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JHF16	Soil	Unknown-13	Validation Flag	J	R	Raymond Wu	4/12/16 2:48 PM	
JHF16	Soil	Unknown-14	Reportable	Y	N	Raymond	4/12/16 2:48 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR0	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 3:25 PM	
JHFR0	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 3:25 PM	
JHFR0	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 3:17 PM	
JHFR0	Soil	3-Bromobenzyl alcohol, trimethylsilyl et	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	3-Bromobenzyl alcohol, trimethylsilyl et	Validation Flag	NJ	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	4-Chloroaniline	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 3:25 PM	
JHFR0	Soil	4-Isothiazolecarboxamide, N-ethyl-3,5-bi	Reportable	Y	N	Raymond	4/12/16 3:12 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR0	Soil	4-Isothiazolecarboxamide, N-ethyl-3,5-bi	Reportable	Y	N	Wu	4/12/16 3:12 PM	
JHFR0	Soil	4-Isothiazolecarboxamide, N-ethyl-3,5-bi	Validation Flag	NJ	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	4-Methylphenol	Validation Flag	J	JQ	Raymond Wu	4/12/16 3:25 PM	
JHFR0	Soil	9-Borabicyclo[3.3.1]nonane,	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	9-Borabicyclo[3.3.1]nonane,	Validation Flag	NJ	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	9-Octadecenoic acid, (E)-	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	9-Octadecenoic acid, (E)-	Validation Flag	NJ	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
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JHFR0	Soil	Anthracene, 9-dodecyltetradecahydro-	Validation Flag	NJ	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	Benzo(a)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
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JHFR0	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
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JHFR0	Soil	Butylbenzylphthalate	Validation Flag	J+	JK	Raymond Wu	4/12/16 3:17 PM	
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JHFR0	Soil	Di-n-octylphthalate	Validation Flag	R	UJK	Raymond Wu	4/12/16 3:17 PM	
JHFR0	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
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JHFR0	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	4/12/16 3:12 PM	
JHFR0	Soil	Naphthalene	Validation	U	R	Raymond	4/12/16 3:12 PM	

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JHFR0	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	4/12/16 3:12 PM	
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR1	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
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JHFR1	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 3:43 PM	
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JHFR1	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 3:43 PM	
JHFR1	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR1	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
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JHFR1	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
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JHFR1	Soil	Propanoic acid, 2-methyl-, 3-hydroxy-2,4	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
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JHFR1	Soil	Tetrachloro-o-benzoquinone	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
JHFR1	Soil	Tetrachloro-o-benzoquinone	Validation	NJ	R	Raymond	4/12/16 3:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR1	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
JHFR1	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/12/16 3:38 PM	
JHFR1	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/12/16 3:38 PM	
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JHFR2	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	1-Nonadecene	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	1-Nonadecene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	11H-Benzo[b]fluorene	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	11H-Benzo[b]fluorene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	2-(2-Bromo-4-methoxyphenoxy)-N'-[1-(2-th	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR2	Soil	2-(2-Bromo-4-methoxyphenoxy)-N'-[1-(2-th	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	4H-Cyclopenta[def]phenanthre	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	4H-Cyclopenta[def]phenanthre	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	6H-Benz[de]anthracen-6-one	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	6H-Benz[de]anthracen-6-one	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	9-Octadecenoic acid, (E)-	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	9-Octadecenoic acid, (E)-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Benzo(b)fluoranthene	Validation Flag		JK	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Benzo(g,h,i)perylene	Validation Flag	J	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Benzo(k)fluoranthene	Reportable	N	Y	Raymond Wu	4/20/16 5:47 PM	
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JHFR2	Soil	Benzo[b]naphtho[2,3-d]furan	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Bis(2-ethylhexyl)phthalate	Validation Flag	J	JQ	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Carbazole	Validation Flag	J	JQ	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Cholestane	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Cyclopenta(cd)pyrene, 3,4-dihydro-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Dehydroabietic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Docosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR2	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Hexachlorocyclo-pentadiene	Validation Flag	R	UJK	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Hexachloroethane	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	R	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Propiconazole	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Propiconazole	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Pyrene, 1-methyl-	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Pyrene, 1-methyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Tetracosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Tetracosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Unknown Alkane-02	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Unknown Alkane-03	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
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JHFR2	Soil	Unknown-08	Reportable	Y	N	Raymond Wu	4/12/16 5:05 PM	
JHFR2	Soil	Unknown-08	Validation	J	R	Raymond	4/12/16 5:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR3	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	4/12/16 5:23 PM	
JHFR3	Soil	11H-Benzo[a]fluoren-11-one	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	11H-Benzo[a]fluoren-11-one	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	11H-Benzo[a]fluorene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	11H-Benzo[a]fluorene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	11H-Benzo[b]fluorene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	11H-Benzo[b]fluorene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	15-Isobutyl-(13.alpha.H)-isocopalane	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	15-Isobutyl-(13.alpha.H)-isocopalane	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 5:23 PM	
JHFR3	Soil	2,4-Dinitrophenol	Validation Flag	UJ	U	Raymond Wu	4/12/16 5:27 PM	
JHFR3	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:23 PM	
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JHFR3	Soil	4-Nitrophenol	Validation Flag	UJ	U	Raymond Wu	4/12/16 5:27 PM	
JHFR3	Soil	4H-Cyclopenta[def]phenanthre	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	4H-Cyclopenta[def]phenanthre	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	9-(Cyanomethylene)fluorene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	9-(Cyanomethylene)fluorene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Anthracene	Reportable	N	Y	Raymond Wu	4/19/16 3:42 PM	
JHFR3	Soil	Anthracene	Reportable	Y	N	Raymond	4/12/16 5:11 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR3	Soil	Benzo(a)pyrene	Validation Flag		JK	Raymond Wu	4/12/16 5:23 PM	
JHFR3	Soil	Benzo(b)fluoranthene	Validation Flag		JK	Raymond Wu	4/12/16 5:23 PM	
JHFR3	Soil	Benzo(b)naphtho(1,2-d)furan	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Benzo(b)naphtho(1,2-d)furan	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Benzo(g,h,i)perylene	Validation Flag	J	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/19/16 3:42 PM	
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JHFR3	Soil	Benzo(k)fluoranthene	Validation Flag		JK	Raymond Wu	4/12/16 5:23 PM	
JHFR3	Soil	Benzo[b]naphtho[2,1-d]thiophene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Chrysene, 1-methyl-	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Chrysene, 1-methyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Cyclopenta(def)phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Cyclopenta(def)phenanthrene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Cyclopentadecanone, 2-hydroxy-	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Cyclopentadecanone, 2-hydroxy-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:27 PM	
JHFR3	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Dibenzofuran	Validation Flag	J	JQ	Raymond Wu	4/12/16 5:23 PM	
JHFR3	Soil	Docosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Hexachlorocyclopentadiene	Validation Flag	R	UJK	Raymond Wu	4/12/16 5:23 PM	
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JHFR3	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Pyrene, 1-methyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Pyrene, 4-methyl-	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Pyrene, 4-methyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Tetrachloro-o-benzoquinone	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Tetrachloro-o-benzoquinone	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Tetracosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Tetracosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown Alkane-02	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown Alkane-02	Validation Flag	J	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown Alkane-03	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown Alkane-03	Validation Flag	J	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Unknown-05	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown-05	Validation Flag	J	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown-06	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Unknown-10	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
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JHFR3	Soil	Unknown-13	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	Unknown-13	Validation	J	R	Raymond	4/12/16 5:11 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR3	Soil	Unknown-13	Flag	J	R	Wu	4/12/16 5:11 PM	
JHFR3	Soil	cis-Vaccenic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	cis-Vaccenic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	n-Hexadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:11 PM	
JHFR3	Soil	n-Hexadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:11 PM	
JHFR4	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil	.beta.-Sitosterol	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	.beta.-Sitosterol	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 5:38 PM	
JHFR4	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 5:38 PM	
JHFR4	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:38 PM	
JHFR4	Soil	4,4,6a,6b,8a,11,12,14b-Octamethyl-1,4,4a	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	4,4,6a,6b,8a,11,12,14b-Octamethyl-1,4,4a	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	A'-Neogammacer-22(29)-ene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	A'-Neogammacer-22(29)-ene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
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JHFR4	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(g,h,i)perylene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
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JHFR4	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Cyclopentasiloxane, decamethyl-	Reportable	Y	N	Raymond	4/12/16 5:33 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR4	Soil	Cyclopentasiloxane, decamethyl-	Reportable	Y	N	Wu	4/12/16 5:33 PM	
JHFR4	Soil	Cyclopentasiloxane, decamethyl-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Di-n-octylphthalate	Validation Flag	UJK	U	Raymond Wu	4/20/16 5:55 PM	
JHFR4	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:38 PM	
JHFR4	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Fluoranthene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Fluorene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Hexachlorocyclopentadiene	Validation Flag	R	UJK	Raymond Wu	4/12/16 5:38 PM	
JHFR4	Soil	Hexachloroethane	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:38 PM	
JHFR4	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
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JHFR4	Soil	Pyrene	Validation Flag	U	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown Aldol Condensate	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown Aldol Condensate	Validation Flag	AJ	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 5:33 PM	
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JHFR4	Soil	Unknown-07	Validation Flag	J	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown-08	Reportable	Y	N	Raymond	4/12/16 5:33 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR4	Soil	Unknown-08	Validation Flag	J	R	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 5:33 PM	
JHFR4	Soil	Unknown-09	Validation Flag	J	R	Raymond Wu	4/12/16 5:33 PM	
JHFR9	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil	.gamma.-Sitosterol	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	.gamma.-Sitosterol	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	1,4-Dioxane	Validation Flag	R	UJK	Raymond Wu	4/12/16 5:54 PM	
JHFR9	Soil	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	U	Raymond Wu	4/12/16 5:54 PM	
JHFR9	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	26-Nor-5-cholesten-3.beta.-ol-25-one	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	26-Nor-5-cholesten-3.beta.-ol-25-one	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:54 PM	
JHFR9	Soil	6-Methoxy-9H-purine	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	6-Methoxy-9H-purine	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	6-Octadecenoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	6-Octadecenoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	A'-Neogammacer-22(29)-ene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	A'-Neogammacer-22(29)-ene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Behenic alcohol	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Campesterol	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Campesterol	Validation	NJ	R	Raymond	4/12/16 5:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR9	Soil	Campesterol	Flag	NJ	R	Wu	4/12/16 5:49 PM	
JHFR9	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Di-n-octylphthalate	Validation Flag	UJK	U	Raymond Wu	4/20/16 5:58 PM	
JHFR9	Soil	Di-n-octylphthalate	Validation Flag	UJ	UJK	Raymond Wu	4/12/16 5:54 PM	
JHFR9	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Dibenzo(a,h)anthracene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Docosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Docosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Hexadecenoic acid, Z-11-	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Hexadecenoic acid, Z-11-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Methyl dehydroabietate	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Octadecane, 1-iodo-	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Octadecane, 1-iodo-	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Octadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Pentadecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Pentadecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
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JHFR9	Soil	Pyrene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Pyrene	Validation	U	R	Raymond	4/12/16 5:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR9	Soil	Squalene	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Squalene	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Stigmast-4-en-3-one	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Stigmast-4-en-3-one	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Stigmasterol	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Stigmasterol	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Testosterone	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Testosterone	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Tetracosanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Tetracosanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Tridecanoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Tridecanoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Aldol Condensate	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Aldol Condensate	Validation Flag	AJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-02	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-02	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-03	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-03	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-04	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-04	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-05	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-05	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-06	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown Alkane-06	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-03	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-03	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-04	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-05	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-05	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-06	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-06	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-07	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-07	Validation	J	R	Raymond	4/12/16 5:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR9	Soil	Unknown-07	Flag	J	R	Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-08	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-08	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	Unknown-09	Validation Flag	J	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	cis-9-Hexadecenoic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	cis-9-Hexadecenoic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	cis-Vaccenic acid	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	cis-Vaccenic acid	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	trans-1,2-Bis(methyldichlorosilyl)et	Reportable	Y	N	Raymond Wu	4/12/16 5:49 PM	
JHFR9	Soil	trans-1,2-Bis(methyldichlorosilyl)et	Validation Flag	NJ	R	Raymond Wu	4/12/16 5:49 PM	
SBLK37	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
SBLK37	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y

Method: Aroclors

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
ABLK91	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
ABLK91	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
ALCS91	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
ALCS91	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil	Aroclor-1254	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:16 AM	
JHF10	Soil	Aroclor-1260	Validated Result	11	54	Raymond Wu	4/8/16 11:16 AM	
JHF10	Soil	Aroclor-1260	Validation Flag	J	U	Raymond Wu	4/8/16 11:16 AM	
JHF11	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil	Aroclor-1254	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:19 AM	
JHF12	Soil	Aroclor-1260	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:45 PM	
JHF12	Soil	Aroclor-1260	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:19 AM	
JHF13	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil	Aroclor-1242	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:46 PM	
JHF13	Soil	Aroclor-1242	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:20 AM	
JHF13	Soil	Aroclor-1254	Validated Result	23	69	Raymond Wu	4/8/16 11:20 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF13	Soil	Aroclor-1254	Validation Flag	J	U	Raymond Wu	4/8/16 11:20 AM	
JHF13	Soil	Aroclor-1260	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:46 PM	
JHF13	Soil	Aroclor-1260	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:20 AM	
JHF14	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil	Aroclor-1242	Validated Result	7.9	77	Raymond Wu	4/8/16 11:21 AM	
JHF14	Soil	Aroclor-1242	Validation Flag	J	U	Raymond Wu	4/8/16 11:21 AM	
JHF14	Soil	Aroclor-1254	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:46 PM	
JHF14	Soil	Aroclor-1254	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:21 AM	
JHF14	Soil	Aroclor-1260	Validated Result	9.0	77	Raymond Wu	4/8/16 11:21 AM	
JHF14	Soil	Aroclor-1260	Validation Flag	J	U	Raymond Wu	4/8/16 11:21 AM	
JHF15	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil	Aroclor-1254	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:26 AM	
JHF15	Soil	Aroclor-1260	Validated Result	5.4	37	Raymond Wu	4/8/16 11:26 AM	
JHF15	Soil	Aroclor-1260	Validation Flag	J	U	Raymond Wu	4/8/16 11:26 AM	
JHF16	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil	Aroclor-1242	Validated Result	5.5	36	Raymond Wu	4/8/16 11:27 AM	
JHF16	Soil	Aroclor-1242	Validation Flag	J	U	Raymond Wu	4/8/16 11:27 AM	
JHFR0	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil	Aroclor-1242	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:28 AM	
JHFR0	Soil	Aroclor-1254	Validated Result	25	55	Raymond Wu	4/8/16 11:28 AM	
JHFR0	Soil	Aroclor-1254	Validation Flag	J	U	Raymond Wu	4/8/16 11:28 AM	
JHFR0	Soil	Aroclor-1260	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:47 PM	
JHFR0	Soil	Aroclor-1260	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:28 AM	
JHFR0MS	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MS	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil	Aroclor-1254	Validated Result	9.9	39	Raymond Wu	4/8/16 11:29 AM	
JHFR1	Soil	Aroclor-1254	Validation Flag	J	U	Raymond Wu	4/8/16 11:29 AM	
JHFR1	Soil	Aroclor-1260	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:48 PM	
JHFR1	Soil	Aroclor-1260	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:29 AM	
JHFR2	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil	Aroclor-1254	Validated Result	8.5	68	Raymond Wu	4/8/16 11:30 AM	
JHFR2	Soil	Aroclor-1254	Validation	J	U	Raymond	4/8/16 11:30 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR2	Soil	Aroclor-1254	Flag	J	U	Wu	4/8/16 11:30 AM	
JHFR2	Soil	Aroclor-1260	Validated Result	2.9	68	Raymond Wu	4/8/16 11:30 AM	
JHFR2	Soil	Aroclor-1260	Validation Flag	J	U	Raymond Wu	4/8/16 11:30 AM	
JHFR3	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil	Aroclor-1254	Validated Result	9.4	48	Raymond Wu	4/8/16 11:31 AM	
JHFR3	Soil	Aroclor-1254	Validation Flag	J	U	Raymond Wu	4/8/16 11:31 AM	
JHFR3	Soil	Aroclor-1260	Validated Result	3.7	48	Raymond Wu	4/8/16 11:31 AM	
JHFR3	Soil	Aroclor-1260	Validation Flag	J	U	Raymond Wu	4/8/16 11:31 AM	
JHFR4	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil	Aroclor-1254	Validated Result	2.3	52	Raymond Wu	4/8/16 11:32 AM	
JHFR4	Soil	Aroclor-1254	Validation Flag	J	U	Raymond Wu	4/8/16 11:32 AM	
JHFR4	Soil	Aroclor-1260	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:32 AM	
JHFR9	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil	Aroclor-1254	Validated Result	1.5	47	Raymond Wu	4/8/16 11:33 AM	
JHFR9	Soil	Aroclor-1254	Validation Flag	J	U	Raymond Wu	4/8/16 11:33 AM	
JHFR9	Soil	Aroclor-1260	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:49 PM	
JHFR9	Soil	Aroclor-1260	Validation Flag	J	JQ	Raymond Wu	4/8/16 11:33 AM	

Method: Volatile Organics

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	Acetone	Validation Flag	J	JQ	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	Bromoform	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/11/16 11:55 AM	
JHF10	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:08 PM	
JHF11	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	Acetone	Validation Flag	J	JQ	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/13/16 2:07 PM	
JHF11	Soil	Chlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:48 PM	
JHF11	Soil	Chlorobenzene	Validation Flag	UJK	U	Raymond Wu	4/13/16 2:07 PM	
JHF11	Soil	Chlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 11:58 AM	
JHF11	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 11:58 AM	
JHF12	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	Acetone	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	Chlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:20 PM	
JHF12	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/11/16 12:00 PM	
JHF12	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:20 PM	
JHF13	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil	.alpha.-Phellandrene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	.alpha.-Phellandrene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	.beta.-Myrcene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	.beta.-Myrcene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	.beta.-Pinene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	.beta.-Pinene	Validation	NJ	R	Raymond	4/13/16 2:22 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF13	Soil	.beta.-Pinene	Flag	NJ	R	Wu	4/13/16 2:22 PM	
JHF13	Soil	.gamma.-Terpinene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	.gamma.-Terpinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	2-Carene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	2-Carene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	3-Carene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	3-Carene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Chlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	D-Limonene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	D-Limonene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Dimethyl sulfide	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Dimethyl sulfide	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Isopropylbenzene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Naphthalene, 1,2,3,4-tetrahydro-6-methyl	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Naphthalene, 1,2,3,4-tetrahydro-6-methyl	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Naphthalene, decahydro-2-methyl-	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Naphthalene, decahydro-2-methyl-	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Thujone	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Thujone	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Toluene	Validation	J	JQ	Raymond	4/11/16 12:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF13	Soil	Toluene	Flag	J	JQ	Wu	4/11/16 12:07 PM	
JHF13	Soil	Tridecane	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Tridecane	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-03	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-03	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-04	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-05	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-05	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-06	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-06	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-07	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-07	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-08	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	Unknown-08	Validation Flag	J	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
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JHF13	Soil	o-Cymene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	o-Cymene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF13	Soil	trans-4a-Methyl-decahydronaphthalene	Reportable	Y	N	Raymond Wu	4/11/16 12:07 PM	
JHF13	Soil	trans-4a-Methyl-decahydronaphthalene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:22 PM	
JHF14	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil	(2E,4E)-3,7-Dimethyl-2,4-octadiene	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	(2E,4E)-3,7-Dimethyl-2,4-octadiene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	.gamma.-Terpinene	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	.gamma.-Terpinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Reportable	Y	N	Raymond	4/11/16 12:14 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF14	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Reportable	Y	N	Wu	4/11/16 12:14 PM	
JHF14	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	3-Carene	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	3-Carene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	4-Octene, 2,6-dimethyl-, [S-(E)]-	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	4-Octene, 2,6-dimethyl-, [S-(E)]-	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	4-Octene, 2,6-dimethyl-, [S-(Z)]-	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	4-Octene, 2,6-dimethyl-, [S-(Z)]-	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Chlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	D-Limonene	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	D-Limonene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Dimethyl sulfide	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Dimethyl sulfide	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Disulfide, dimethyl	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Disulfide, dimethyl	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Methylene chloride	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Naphthalene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Naphthalene, decahydro-2-methyl-	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Naphthalene, decahydro-2-methyl-	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Styrene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Thujone	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Thujone	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-01	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown Alkane-02	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown Alkane-03	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-03	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown Alkane-04	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-04	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown Alkane-05	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-05	Validation	J	R	Raymond	4/13/16 2:25 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF14	Soil	Unknown Alkane-05	Flag	J	R	Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown Alkane-06	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown Alkane-06	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-03	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-03	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-04	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-04	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-05	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-05	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-06	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-06	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-07	Reportable	Y	N	Raymond Wu	4/11/16 12:32 PM	
JHF14	Soil	Unknown-07	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-08	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-08	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	Unknown-09	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	Unknown-09	Validation Flag	J	R	Raymond Wu	4/13/16 2:25 PM	
JHF14	Soil	m, p-Xylene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	o-Cymene	Reportable	Y	N	Raymond Wu	4/11/16 12:14 PM	
JHF14	Soil	o-Cymene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:25 PM	
JHF15	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:18 PM	
JHF15	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:18 PM	
JHF16	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil	1,2,3-Trichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJK	U	Raymond Wu	4/19/16 1:46 PM	
JHF16	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	1,2,4-Trichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJK	U	Raymond Wu	4/19/16 1:46 PM	
JHF16	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	UJK	U	Raymond Wu	4/19/16 1:46 PM	
JHF16	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	1,2-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	1,2-Dichlorobenzene	Validation	UJK	U	Raymond	4/19/16 1:46 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF16	Soil	1,2-Dichlorobenzene	Flag	UJK	U	Wu	4/19/16 1:46 PM	
JHF16	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	1,3-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	1,3-Dichlorobenzene	Validation Flag	UJK	U	Raymond Wu	4/19/16 1:46 PM	
JHF16	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	1,4-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	1,4-Dichlorobenzene	Validation Flag	UJK	U	Raymond Wu	4/19/16 1:46 PM	
JHF16	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/21/16 4:56 PM	
JHF16	Soil	Bromoform	Validation Flag	UJK	U	Raymond Wu	4/19/16 1:46 PM	
JHF16	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	Chlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:28 PM	
JHF16	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/11/16 12:22 PM	
JHF16	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:28 PM	
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JHFR0	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil	1,2,3-Trichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:28 PM	
JHFR0	Soil	1,2,4-Trichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:28 PM	
JHFR0	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:28 PM	
JHFR0	Soil	1,2-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:28 PM	
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JHFR0	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:28 PM	
JHFR0	Soil	Chlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:28 PM	
JHFR0	Soil	Isopropylbenzene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:28 PM	
JHFR0	Soil	Toluene	Reportable	Y	N	Raymond Wu	4/11/16 12:28 PM	
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JHFR0	Soil	Trichloroethene	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:28 PM	
JHFR0ME	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0ME	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0ME	Soil	1,1,1-Trichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
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JHFR0ME	Soil	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1,2-Trichloro-1,2,2-Trifluoroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1,2-Trichloro-1,2,2-Trifluoroethane	Validation	U	R	Raymond	4/11/16 12:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR0ME	Soil	1,1,2-Trichloro-1,2,2-Trifluoroethane	Flag	U	R	Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1,2-Trichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1,2-Trichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1-Dichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1-Dichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1-Dichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,1-Dichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2,3-Trichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2,3-Trichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2,4-Trichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2,4-Trichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dibromoethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dibromoethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dichloropropane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,2-Dichloropropane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,3-Dichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,3-Dichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,4-Dichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	1,4-Dichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	2-Butanone	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	2-Butanone	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	2-Hexanone	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	2-Hexanone	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	4-Methyl-2-pentanone	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	4-Methyl-2-pentanone	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Acetone	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Acetone	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Benzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Benzene	Validation Flag	UJ	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromochloromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromochloromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromodichloromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromodichloromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromoform	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromoform	Validation	U	R	Raymond	4/11/16 12:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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JHFR0ME	Soil	Bromomethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Bromomethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Carbon disulfide	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Carbon disulfide	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Carbon tetrachloride	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Carbon tetrachloride	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chloroform	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chloroform	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Chloromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
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JHFR0ME	Soil	Cyclohexane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Cyclohexane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Dibromochloromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Dibromochloromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Dichlorodifluoromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Dichlorodifluoromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Ethylbenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Ethylbenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Isopropylbenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Isopropylbenzene	Validation Flag	J+	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methyl acetate	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methyl acetate	Validation Flag		R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methyl tert-butyl ether	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methyl tert-butyl ether	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methylcyclohexane	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methylcyclohexane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methylene chloride	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Methylene chloride	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
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JHFR0ME	Soil	Tetrachloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Tetrachloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Toluene	Validation Flag	J+	JH	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Trichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Trichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Trichlorofluoromethane	Reportable	Y	N	Raymond	4/11/16 12:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR0ME	Soil	Trichlorofluoromethane	Reportable	Y	N	Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Trichlorofluoromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Vinyl chloride	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	Vinyl chloride	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	cis-1,2-Dichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	cis-1,2-Dichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	cis-1,3-Dichloropropene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	cis-1,3-Dichloropropene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	m, p-Xylene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	m, p-Xylene	Validation Flag	J+	R	Raymond Wu	4/11/16 12:38 PM	
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JHFR0ME	Soil	trans-1,2-Dichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	trans-1,2-Dichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	trans-1,3-Dichloropropene	Reportable	Y	N	Raymond Wu	4/11/16 12:38 PM	
JHFR0ME	Soil	trans-1,3-Dichloropropene	Validation Flag	U	R	Raymond Wu	4/11/16 12:38 PM	
JHFR0MEMS	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MEMS	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MEMSD	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MEMSD	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MS	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MS	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil	1,2,3-Trichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	1,2,4-Trichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	1,2-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	1,3-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	1,4-Dichlorobenzene	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	2-Butanone	Reportable	Y	N	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	2-Butanone	Validation Flag		R	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	4-Methyl-2-pentanone	Validation Flag	J		Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	Acetone	Reportable	Y	N	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	Acetone	Validation Flag		R	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	Methylene chloride	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:42 PM	
JHFR1	Soil	Toluene	Reportable	Y	N	Raymond	4/11/16 12:42 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR1	Soil	Toluene	Reportable	Y	N	Wu	4/11/16 12:42 PM	
JHFR1	Soil	Toluene	Validation Flag		R	Raymond Wu	4/11/16 12:42 PM	
JHFR1ME	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1ME	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1ME	Soil	1,1,1-Trichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,1-Trichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,2-Trichloro-1,2,2-Trifluoroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,2-Trichloro-1,2,2-Trifluoroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,2-Trichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1,2-Trichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1-Dichloroethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1-Dichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1-Dichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,1-Dichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2,3-Trichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2,3-Trichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2,4-Trichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2,4-Trichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dibromoethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dibromoethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	1,2-Dichloroethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dichloropropane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,2-Dichloropropane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,3-Dichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,3-Dichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,4-Dichlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	1,4-Dichlorobenzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	2-Hexanone	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	2-Hexanone	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	4-Methyl-2-pentanone	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	4-Methyl-2-pentanone	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Benzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Benzene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromochloromethane	Reportable	Y	N	Raymond	4/11/16 12:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR1ME	Soil	Bromochloromethane	Reportable	Y	N	Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromochloromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromodichloromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromodichloromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromoform	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromoform	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromomethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Bromomethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Carbon disulfide	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Carbon disulfide	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Carbon tetrachloride	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Carbon tetrachloride	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Chlorobenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	Dichlorodifluoromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	Isopropylbenzene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	Methyl tert-butyl ether	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	Methylcyclohexane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	Methylene chloride	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Methylene chloride	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
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JHFR1ME	Soil	Styrene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Tetrachloroethene	Reportable	Y	N	Raymond	4/11/16 12:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR1ME	Soil	Tetrachloroethene	Reportable	Y	N	Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Tetrachloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Trichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Trichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Trichlorofluoromethane	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Trichlorofluoromethane	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Vinyl chloride	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	Vinyl chloride	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	cis-1,2-Dichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	cis-1,2-Dichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	cis-1,3-Dichloropropene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	cis-1,3-Dichloropropene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	m, p-Xylene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	m, p-Xylene	Validation Flag		R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	o-Xylene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	o-Xylene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	trans-1,2-Dichloroethene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	trans-1,2-Dichloroethene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	trans-1,3-Dichloropropene	Reportable	Y	N	Raymond Wu	4/11/16 12:44 PM	
JHFR1ME	Soil	trans-1,3-Dichloropropene	Validation Flag	U	R	Raymond Wu	4/11/16 12:44 PM	
JHFR2	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil	.alpha.-Phellandrene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	.alpha.-Phellandrene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	.alpha.-Pinene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	.alpha.-Pinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	.beta.-Myrcene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	.beta.-Myrcene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	.beta.-Pinene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	.beta.-Pinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	.gamma.-Terpinene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	.gamma.-Terpinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	3-Carene	Reportable	Y	N	Raymond	4/11/16 12:47 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR2	Soil	3-Carene	Reportable	Y	N	Wu	4/11/16 12:47 PM	
JHFR2	Soil	3-Carene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-m	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Chlorobenzene	Validation Flag	UJ	U	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	D-Limonene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	D-Limonene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Dimethyl sulfide	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Dimethyl sulfide	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Eucalyptol	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Eucalyptol	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Unknown-02	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Unknown-02	Validation Flag	J	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	Unknown-03	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	Unknown-03	Validation Flag	J	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	o-Cymene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	o-Cymene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR2	Soil	p-Cymene	Reportable	Y	N	Raymond Wu	4/11/16 12:47 PM	
JHFR2	Soil	p-Cymene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:38 PM	
JHFR3	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:48 PM	
JHFR3	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:48 PM	
JHFR3	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:40 PM	
JHFR4	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil	.alpha.-Pinene	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	.alpha.-Pinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	.gamma.-Terpinene	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	.gamma.-Terpinene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/19/16 1:50 PM	
JHFR4	Soil	1,2-Dichlorobenzene	Validation	UJ	UJK	Raymond	4/11/16 12:51 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR4	Soil	1,2-Dichlorobenzene	Flag	UJ	UJK	Wu	4/11/16 12:51 PM	
JHFR4	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	2-Carene	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	2-Carene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	Bicyclo[3.1.0]hexan-3-one, 4-methyl-1-(1	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/13/16 2:41 PM	
JHFR4	Soil	Chlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	Cyclohexene, 1-methyl-4-(1-methylethylid	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	D-Limonene	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	D-Limonene	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	Thujone	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	Thujone	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:42 PM	
JHFR4	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	Unknown-01	Reportable	Y	N	Raymond Wu	4/11/16 12:51 PM	
JHFR4	Soil	Unknown-01	Validation Flag	J	R	Raymond Wu	4/13/16 2:42 PM	
JHFR9	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	1,2-Dichloropropane	Validation Flag	UJ	U	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	2-Hexanone	Validation Flag	UJ	UJK	Raymond Wu	4/13/16 2:44 PM	
JHFR9	Soil	4-Methyl-2-pentanone	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	Bromoform	Validation Flag	U	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	Chlorobenzene	Validation Flag	UJ	UJK	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	Furan	Reportable	Y	N	Raymond Wu	4/11/16 12:53 PM	
JHFR9	Soil	Furan	Validation Flag	NJ	R	Raymond Wu	4/13/16 2:44 PM	
JHFR9	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	4/11/16 12:53 PM	
VBLKOO	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
VBLKOO	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
VBLKQA	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
VBLKQA	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
VBLKQC	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
VBLKQC	Soil		Validation		S4VEM	Raymond	4/7/16 6:01 PM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
VBLKQC	Soil		Level		S4VEM	Wu	4/7/16 6:01 PM	Y
VBLKQL	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
VBLKQL	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
VHBLK01	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
VHBLK01	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y

Method: Semivolatiles by SIM

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil	Acenaphthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:29 AM	
JHF10	Soil	Acenaphthylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:29 AM	
JHF10	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 10:29 AM	
JHF10	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/12/16 10:29 AM	
JHF10	Soil	Chrysene	Validation Flag		JK	Raymond Wu	4/12/16 10:29 AM	
JHF10	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JK	Raymond Wu	4/12/16 10:29 AM	
JHF10	Soil	Pyrene	Validation Flag		JK	Raymond Wu	4/12/16 10:29 AM	
JHF11	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil	Benzo(b)fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:41 AM	
JHF11	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:41 AM	
JHF11	Soil	Fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:41 AM	
JHF11	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:41 AM	
JHF11	Soil	Phenanthrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:41 AM	
JHF11	Soil	Pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:41 AM	
JHF12	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil	Acenaphthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Acenaphthylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Benzo(k)fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Chrysene	Validation Flag	JQ	JK	Raymond Wu	4/19/16 12:45 PM	
JHF12	Soil	Chrysene	Validation Flag		JQ	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:25 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF12	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:44 AM	
JHF12	Soil	Pyrene	Validation Flag		JK	Raymond Wu	4/12/16 10:44 AM	
JHF13	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil	Acenaphthylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 10:56 AM	
JHF13	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 10:56 AM	
JHF13	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/12/16 10:56 AM	
JHF13	Soil	Chrysene	Validation Flag		JK	Raymond Wu	4/12/16 10:56 AM	
JHF13	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JK	Raymond Wu	4/12/16 10:56 AM	
JHF13	Soil	Pyrene	Validation Flag		JK	Raymond Wu	4/12/16 10:56 AM	
JHF14	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 11:00 AM	
JHF14	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:00 AM	
JHF14	Soil	Chrysene	Validation Flag		JK	Raymond Wu	4/12/16 11:00 AM	
JHF14	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:00 AM	
JHF14	Soil	Pyrene	Validation Flag		JK	Raymond Wu	4/12/16 11:00 AM	
JHF15	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil	Acenaphthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:07 AM	
JHF15	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 11:07 AM	
JHF15	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:07 AM	
JHF15	Soil	Chrysene	Validation Flag		JK	Raymond Wu	4/12/16 11:07 AM	
JHF15	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:07 AM	
JHF15	Soil	Pyrene	Validation Flag		JK	Raymond Wu	4/12/16 11:07 AM	
JHF16	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil	2-Methylnaphthalene	Validation Flag	J+	JH	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Anthracene	Validation Flag	J+	JQ	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Benzo(a)anthracene	Validation Flag	U	UJK	Raymond Wu	4/21/16 12:01 PM	
JHF16	Soil	Benzo(a)pyrene	Validation Flag	J+	JQ	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Benzo(b)fluoranthene	Validation Flag	J+		Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Benzo(g,h,i)perylene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:29 PM	
JHF16	Soil	Benzo(g,h,i)perylene	Validation Flag	J+	JQ	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Chrysene	Validation Flag	J+	JK	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Fluoranthene	Validation Flag	J+		Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:29 PM	
JHF16	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J+	JQ	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Naphthalene	Validation Flag	J+	JQ	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Phenanthrene	Validation Flag	J+	JH	Raymond Wu	4/12/16 11:29 AM	
JHF16	Soil	Pyrene	Validation	J+	JK	Raymond	4/12/16 11:29 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF16	Soil	Pyrene	Flag	J+	JK	Wu	4/12/16 11:29 AM	
JHFR0	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil	Acenaphthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Acenaphthylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Chrysene	Validation Flag		JK	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:33 AM	
JHFR0	Soil	Pyrene	Validation Flag	J	JK	Raymond Wu	4/12/16 11:33 AM	
JHFR0MS	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MS	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil	Acenaphthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:38 AM	
JHFR1	Soil	Acenaphthylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:38 AM	
JHFR1	Soil	Anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:38 AM	
JHFR1	Soil	Benzo(a)anthracene	Validation Flag		JK	Raymond Wu	4/12/16 11:38 AM	
JHFR1	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JK	Raymond Wu	4/21/16 12:05 PM	
JHFR1	Soil	Chrysene	Validation Flag		JK	Raymond Wu	4/12/16 11:38 AM	
JHFR1	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JK	Raymond Wu	4/21/16 12:05 PM	
JHFR1	Soil	Pyrene	Validation Flag		JK	Raymond Wu	4/12/16 11:38 AM	
JHFR2	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil	2-Methylnaphthalene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(a)anthracene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(a)pyrene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(b)fluoranthene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(g,h,i)perylene	Validation Flag	J		Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Benzo(k)fluoranthene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Chrysene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Fluoranthene	Validation		R	Raymond	4/12/16 11:44 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR2	Soil	Fluoranthene	Flag		R	Wu	4/12/16 11:44 AM	
JHFR2	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J		Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Phenanthrene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Pyrene	Reportable	Y	N	Raymond Wu	4/12/16 11:44 AM	
JHFR2	Soil	Pyrene	Validation Flag		R	Raymond Wu	4/12/16 11:44 AM	
JHFR3	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil	Anthracene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Anthracene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(a)anthracene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(a)pyrene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(b)fluoranthene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Benzo(g,h,i)perylene	Validation Flag	J		Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Chrysene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Chrysene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Fluoranthene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J		Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Phenanthrene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Pyrene	Reportable	Y	N	Raymond Wu	4/12/16 11:54 AM	
JHFR3	Soil	Pyrene	Validation Flag		R	Raymond Wu	4/12/16 11:54 AM	
JHFR4	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil	Acenaphthylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Benzo(a)anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Benzo(a)pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Benzo(g,h,i)perylene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:33 PM	
JHFR4	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Benzo(k)fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Chrysene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:33 PM	
JHFR4	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Phenanthrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 11:59 AM	
JHFR4	Soil	Pyrene	Validation	J	JQ	Raymond	4/12/16 11:59 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR4	Soil	Pyrene	Flag	J	JQ	Wu	4/12/16 11:59 AM	
JHFR9	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil	Anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Benzo(a)anthracene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Benzo(a)pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Benzo(b)fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Benzo(g,h,i)perylene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:34 PM	
JHFR9	Soil	Benzo(g,h,i)perylene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Benzo(k)fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Chrysene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Fluoranthene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	JQ	JK	Raymond Wu	4/21/16 12:34 PM	
JHFR9	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Pentachlorophenol	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Phenanthrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
JHFR9	Soil	Pyrene	Validation Flag	J	JQ	Raymond Wu	4/12/16 12:00 PM	
SBLK39	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
SBLK39	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y

Method: Pesticides

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF10	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF10	Soil	4,4'-DDD	Validated Result	1.0	5.5	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	4,4'-DDD	Validation Flag	J+	U	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	4,4'-DDE	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	4,4'-DDT	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	Dieldrin	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	Endrin	Validation Flag	NJ	U	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	Methoxychlor	Validated Result	3.5	28	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	cis-Chlordane	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	trans-Chlordane	Validated Result	1.2	2.8	Raymond Wu	4/11/16 1:04 PM	
JHF10	Soil	trans-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:04 PM	
JHF11	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF11	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF11	Soil	alpha-BHC	Validated Result	0.58	6.9	Raymond Wu	4/11/16 1:05 PM	
JHF11	Soil	alpha-BHC	Validation Flag	J	U	Raymond Wu	4/11/16 1:05 PM	
JHF12	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF12	Soil	4,4'-DDD	Validated Result	0.46	3.9	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	4,4'-DDD	Validation Flag	J+	U	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	4,4'-DDT	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:51 PM	
JHF12	Soil	4,4'-DDT	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	Endrin	Validation Flag	NJ	U	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	Methoxychlor	Validated Result	1.3	20	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	cis-Chlordane	Validated Result	0.75	2.0	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	cis-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	trans-Chlordane	Validated Result	0.48	2.0	Raymond Wu	4/11/16 1:08 PM	
JHF12	Soil	trans-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:08 PM	
JHF13	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF13	Soil	4,4'-DDD	Validated Result	2.0	6.8	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	4,4'-DDD	Validation Flag	J+	U	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	4,4'-DDE	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	4,4'-DDT	Validation Flag	JL	JK	Raymond Wu	4/18/16 5:12 PM	
JHF13	Soil	4,4'-DDT	Validation Flag	J+	JL	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Aldrin	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Dieldrin	Validation Flag	J+	U	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Endosulfan I	Validated Result	0.44	3.5	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Endosulfan I	Validation Flag	J+	U	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Endosulfan sulfate	Validated Result	0.68	6.8	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Endosulfan sulfate	Validation Flag	J+	U	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Endrin aldehyde	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Methoxychlor	Validated Result	7.2	35	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	cis-Chlordane	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:12 PM	
JHF13	Soil	trans-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:12 PM	
JHF14	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF14	Soil	4,4'-DDD	Validated Result	2.1	7.8	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	4,4'-DDD	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	4,4'-DDE	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	4,4'-DDT	Validation Flag	J+	JL	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Dieldrin	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endosulfan I	Validated	0.56	4.0	Raymond	4/11/16 1:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF14	Soil	Endosulfan I	Result	0.56	4.0	Wu	4/11/16 1:17 PM	
JHF14	Soil	Endosulfan I	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endosulfan II	Validated Result	3.5	7.8	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endosulfan II	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endosulfan sulfate	Validated Result	3.0	7.8	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endosulfan sulfate	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endrin	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endrin aldehyde	Validated Result	0.87	7.8	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Endrin aldehyde	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Heptachlor epoxide	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Methoxychlor	Validated Result	12	40	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	alpha-BHC	Validated Result	0.61	4.0	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	alpha-BHC	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	cis-Chlordane	Validation Flag	J+	JL	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	gamma-BHC (Lindane)	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF14	Soil	trans-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:17 PM	
JHF15	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF15	Soil	4,4'-DDT	Validation Flag	J	JQ	Raymond Wu	4/19/16 1:07 PM	
JHF15	Soil	Dieldrin	Validated Result	0.38	3.8	Raymond Wu	4/19/16 1:07 PM	
JHF15	Soil	Dieldrin	Validation Flag	J	U	Raymond Wu	4/19/16 1:07 PM	
JHF15	Soil	Methoxychlor	Validation Flag	J	JQ	Raymond Wu	4/19/16 1:07 PM	
JHF15	Soil	cis-Chlordane	Validation Flag	J	JQ	Raymond Wu	4/19/16 1:07 PM	
JHF15	Soil	trans-Chlordane	Validated Result	0.49	1.9	Raymond Wu	4/19/16 1:07 PM	
JHF15	Soil	trans-Chlordane	Validation Flag	J	U	Raymond Wu	4/19/16 1:07 PM	
JHF16	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHF16	Soil	4,4'-DDD	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	4,4'-DDE	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	4,4'-DDT	Validation Flag	J+	JL	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Aldrin	Validated Result	0.25	1.8	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Aldrin	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Dieldrin	Validated Result	2.9	3.6	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Dieldrin	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endosulfan I	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endosulfan II	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endosulfan sulfate	Validation Flag	J+	JL	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endrin	Validated Result	2.1	3.6	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endrin	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endrin aldehyde	Validation	J+	JK	Raymond	4/11/16 1:24 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHF16	Soil	Endrin aldehyde	Flag	J+	JK	Wu	4/11/16 1:24 PM	
JHF16	Soil	Endrin ketone	Validated Result	3.4	3.6	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Endrin ketone	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Heptachlor	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Heptachlor epoxide	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Methoxychlor	Validated Result	10	18	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	alpha-BHC	Validated Result	0.47	1.8	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	alpha-BHC	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	beta-BHC	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	cis-Chlordane	Validated Result	0.31	1.8	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	cis-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	delta-BHC	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:24 PM	
JHF16	Soil	gamma-BHC (Lindane)	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:24 PM	
JHFR0	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0	Soil	4,4'-DDD	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:16 PM	
JHFR0	Soil	4,4'-DDD	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	4,4'-DDE	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	4,4'-DDT	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Dieldrin	Validation Flag	J+	JK	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endosulfan II	Validated Result	2.4	5.4	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endosulfan II	Validation Flag	J+	U	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endrin	Validated Result	0.67	5.4	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endrin	Validation Flag	J+	U	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endrin aldehyde	Validated Result	1.3	5.4	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endrin aldehyde	Validation Flag	J+	U	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endrin ketone	Validated Result	1.2	5.4	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Endrin ketone	Validation Flag	J+	U	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Heptachlor epoxide	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Methoxychlor	Validated Result	3.4	28	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	cis-Chlordane	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:16 PM	
JHFR0	Soil	cis-Chlordane	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	trans-Chlordane	Validated Result	1.7	2.8	Raymond Wu	4/11/16 1:35 PM	
JHFR0	Soil	trans-Chlordane	Validation Flag	J+	U	Raymond Wu	4/11/16 1:35 PM	
JHFR0MS	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MS	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR0MSD	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Reportable		Y	Raymond	4/7/16 6:01 PM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR1	Soil		Reportable		Y	Wu	4/7/16 6:01 PM	Y
JHFR1	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR1	Soil	4,4'-DDT	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Dieldrin	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Endosulfan I	Validated Result	0.39	2.0	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Endosulfan I	Validation Flag	J+	U	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Endosulfan sulfate	Validation Flag	JQ	JK	Raymond Wu	4/21/16 2:00 PM	
JHFR1	Soil	Endosulfan sulfate	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Heptachlor epoxide	Validated Result	0.34	2.0	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Heptachlor epoxide	Validation Flag	J+	U	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Methoxychlor	Validated Result	0.64	20	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	Methoxychlor	Validation Flag	J+	U	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	cis-Chlordane	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:38 PM	
JHFR1	Soil	trans-Chlordane	Validation Flag	JQ	JK	Raymond Wu	4/19/16 1:11 PM	
JHFR1	Soil	trans-Chlordane	Validation Flag	J+	JQ	Raymond Wu	4/11/16 1:38 PM	
JHFR2	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR2	Soil	4,4'-DDD	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:14 PM	
JHFR2	Soil	4,4'-DDD	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	4,4'-DDE	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	4,4'-DDT	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	Dieldrin	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	Endosulfan sulfate	Validated Result	0.56	6.8	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	Endosulfan sulfate	Validation Flag	J	U	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	Heptachlor epoxide	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	Methoxychlor	Validated Result	0.93	35	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	Methoxychlor	Validation Flag	J	U	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	cis-Chlordane	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	trans-Chlordane	Validated Result	0.56	3.5	Raymond Wu	4/11/16 1:41 PM	
JHFR2	Soil	trans-Chlordane	Validation Flag	J	U	Raymond Wu	4/11/16 1:41 PM	
JHFR3	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR3	Soil	4,4'-DDE	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:14 PM	
JHFR3	Soil	4,4'-DDE	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Dieldrin	Validation Flag		U	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Endosulfan sulfate	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Endrin	Validated Result	1.1	4.8	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Endrin	Validation Flag	J	U	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Endrin aldehyde	Validated Result	0.63	4.8	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Endrin aldehyde	Validation Flag	J	U	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Heptachlor epoxide	Validation	J	JQ	Raymond	4/11/16 1:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JHFR3	Soil	Heptachlor epoxide	Flag	J	JQ	Wu	4/11/16 1:44 PM	
JHFR3	Soil	Methoxychlor	Validated Result	1.2	24	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	Methoxychlor	Validation Flag	J	U	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	cis-Chlordane	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:14 PM	
JHFR3	Soil	cis-Chlordane	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	gamma-BHC (Lindane)	Validated Result	0.73	2.4	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	gamma-BHC (Lindane)	Validation Flag	J	U	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	trans-Chlordane	Validated Result	2.1	2.4	Raymond Wu	4/11/16 1:44 PM	
JHFR3	Soil	trans-Chlordane	Validation Flag	J	U	Raymond Wu	4/11/16 1:44 PM	
JHFR4	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
JHFR4	Soil	4,4'-DDE	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:46 PM	
JHFR4	Soil	4,4'-DDT	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:16 PM	
JHFR4	Soil	4,4'-DDT	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:46 PM	
JHFR4	Soil	Dieldrin	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:46 PM	
JHFR4	Soil	Heptachlor epoxide	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:46 PM	
JHFR4	Soil	cis-Chlordane	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:46 PM	
JHFR4	Soil	trans-Chlordane	Validation Flag	JQ	JK	Raymond Wu	4/18/16 5:16 PM	
JHFR4	Soil	trans-Chlordane	Validation Flag	J	JQ	Raymond Wu	4/11/16 1:46 PM	
JHFR9	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
JHFR9	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
PBLK90	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
PBLK90	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y
PLCS90	Soil		Reportable		Y	Raymond Wu	4/7/16 6:01 PM	Y
PLCS90	Soil		Validation Level		S4VEM	Raymond Wu	4/7/16 6:01 PM	Y



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MEMORANDUM

DATE: April 4, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington MW

SUBJ: Inorganic Data Summary Check, May Creek Landfill Site, Renton, Washington

REF: TDD: 16-02-0007 PAN: 1004530.0004.145.01

The data summary check of 13 soil samples collected from the May Creek Landfill site located in Renton, Washington has been completed. Analyses for total metals were performed following EPA CLP SOW ISM02.2 at the Chemtech Consulting Group, Mountainside, New Jersey. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VE/M).

The samples were numbered:

MJHFR0	MJHFR1	MJHFR2	MJHFR3	MJHFR4
MJHFR9	MJHFR10	MJHFR11	MJHFR12	MJHFR13
MJHFR14	MJHFR15	MJHFR16		

No discrepancies were noted.



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OFFICE OF
ENVIRONMENTAL ASSESSMENT

March 31, 2016

MEMORANDUM

SUBJECT: Revised Data Validation for Removal Program Sampling at the May Creek Landfill
Case# 46026, SDG – MJHFR0, Inorganic Metals Analysis

FROM: Don Matheny, Chemist *DM*
OEA, Environmental Services Unit

TO: Jeff Fowlow, On-Scene Coordinator
Office of Environmental Cleanup

CC: Renee Nordeen, Ecology & Environment, Inc.

The revised quality assurance (QA) review of the analytical data generated from the analysis of thirteen (13) soils collected from the above referenced site has been completed. This revision is due to the addition of bias qualifiers in the updated SSSP. These samples were analyzed for total metals by the Chemtech Consulting Group located in Mountainside, NJ.

Sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in:

- SSSP for May Creek Landfill Site, Ecology & Environment, Inc., March, 2016
- USEPA CLP Statement of Work for Inorganic Superfund Methods (ISM02.3)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The conclusions presented here are based on the information provided for the review. Some data may be qualified using the reviewer's professional judgment the details of which will be provided. A summary of samples evaluated in this validation report and the pertinent dates for sample collection, laboratory sample receipt and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

The following table summarizes the major sample quality control (QC) tests, associated test results, criteria for evaluation and identification of outliers. Some criteria for evaluation may be QAPP specific and different from the National Functional Guidelines. Instrument QC checks were electronically evaluated the results of which are not summarized here though any excursions of instrument QC will appear in the *Data Qualifications* section.

Quality Control Test	Result Ranges	Outliers ¹ (Y or N)	Evaluation Criteria
Blanks	Detects Reported	Y	Not detected or <10% of Sample
Matrix Spike (MJHFR0) ²	51 - 180%	Y	75 - 125% Recovery
Lab Duplicate (MJHFR0)	≤ 2% or ± 2xCRQL	N	≤ 35% RPD or ± 2xCRQL
LCS (blank spike)	90 - 124%	N	70 - 130% Recovery
Serial Dilution (MJHFR0) ³	≤ 7%	N	≤ 10% Difference

¹ See the “*Data Qualifications*” section below for QC excursions and qualification of affected data.

² The Matrix Spike test could not be performed for Lead because the spiking concentration was too low (< 25%) in comparison to the native concentration in the sample.

³ The Serial Dilution test could not be performed on the following elements because the native concentrations were too low for conducting a 1:5 serial dilution comparison: Antimony, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Potassium, Selenium, Silver, Sodium, & Thallium.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Blanks
The following analytes have detected sample results < CRQLs and the associated lab blanks are also detected but ≤ CRQLs. Affected sample results are qualified U and the analyte values elevated to the CRQLs. Non-detected analytes are not qualified.
Qualified Analytical Results: Silver – [MJHFR0 - MJHFR4], MJHFR9, MJHFR10, [MJHFR12 - MJHFR16]

DATA QUALIFICATIONS - Continued

Detection / Quantitation Limits
<p>The following analytes have detected sample results < CRQLs and the associated lab blanks are non-detect. Affected sample results are qualified JQ.</p>
<p>Qualified Analytical Results:</p> <p>Antimony – MJHFR0, MJHFR2, MJHFR3, MJHFR4, MJHFR9, MJHFR10, [MJHFR12 - MJHFR16]</p> <p>Beryllium - [MJHFR0 - MJHFR3], [MJHFR9 - MJHFR16]</p> <p>Cadmium – MJHFR11, MJHFR14</p> <p>Cobalt – MJHFR0, MJHFR1, MJHFR11, MJHFR13, MJHFR14</p> <p>Lead - MJHFR11</p> <p>Mercury – MJHFR0, MJHFR1, MJHFR3, MJHFR4, [MJHFR9 - MJHFR16]</p> <p>Nickel - MJHFR11</p> <p>Potassium - MJHFR0</p> <p>Selenium – [MJHFR0 - MJHFR4], [MJHFR9 - MJHFR15]</p> <p>Sodium – [MJHFR0 - MJHFR4], MJHFR9, MJHFR10, MJHFR12, MJHFR13, MJHFR14</p> <p>Thallium – MJHFR0, MJHFR2, MJHFR3, MJHFR4, MJHFR9, MJHFR12, MJHFR15, MJHFR16</p> <p>Vanadium - MJHFR11</p>
Matrix Spikes
<p>The following analytes had Matrix Spike recoveries outside of the 75-125% acceptance criteria that resulted in data qualifications:</p>
<p>Antimony had a matrix spike recovery of 51% and post-digestion spike recovery of 93%. Non-detected values are qualified UJL. Qualified Analytical Results: MJHFR1, MJHFR11</p> <p>Copper had a matrix spike recovery of 180% and post-digestion spike recovery of 134%. Detected values > CRQLs are qualified JH. Qualified Analytical Results: All samples</p> <p>Manganese had a matrix spike recovery of 154% and post-digestion spike recovery of 102%. Detected values > CRQLs are qualified JH. Qualified Analytical Results: All samples</p>

Data Qualifiers

The following is a list of data qualifiers applied to the sample result(s) and their definitions. Project specific qualifiers are appended for the purpose of providing more context to data utility.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

The sample listing dates of sample collection, laboratory receipt and analysis are provided below.

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	Mercury Analysis
MJHFR0	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR1	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR10	Soil	2/25/2016	3/1/2016	3/3-8/2016	3/2/2016
MJHFR11	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR12	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR13	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR14	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR15	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR16	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR2	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR3	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR4	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016
MJHFR9	Soil	2/25/2016	3/1/2016	3/3/2016	3/2/2016

Sample Summary Report

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: LCS002	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	42.1		mg/kg	42.1		1.0	Yes	S4VEM
Antimony	Spike	12.1		mg/kg	12.1		1.0	Yes	S4VEM
Arsenic	Spike	1.8		mg/kg	1.8		1.0	Yes	S4VEM
Barium	Spike	44.1		mg/kg	44.1		1.0	Yes	S4VEM
Beryllium	Spike	1.1		mg/kg	1.1		1.0	Yes	S4VEM
Cadmium	Spike	1.0		mg/kg	1.0		1.0	Yes	S4VEM
Chromium	Spike	2.4		mg/kg	2.4		1.0	Yes	S4VEM
Cobalt	Spike	9.9		mg/kg	9.9		1.0	Yes	S4VEM
Copper	Spike	5.9		mg/kg	5.9		1.0	Yes	S4VEM
Iron	Spike	24.7		mg/kg	24.7		1.0	Yes	S4VEM
Lead	Spike	2.0		mg/kg	2.0		1.0	Yes	S4VEM
Manganese	Spike	3.5		mg/kg	3.5		1.0	Yes	S4VEM
Nickel	Spike	8.3		mg/kg	8.3		1.0	Yes	S4VEM
Selenium	Spike	6.8		mg/kg	6.8		1.0	Yes	S4VEM
Silver	Spike	2.1		mg/kg	2.1		1.0	Yes	S4VEM
Thallium	Spike	5.4		mg/kg	5.4		1.0	Yes	S4VEM
Vanadium	Spike	11.6		mg/kg	11.6		1.0	Yes	S4VEM
Zinc	Spike	11.9		mg/kg	11.9		1.0	Yes	S4VEM
Calcium	Spike	1110		mg/kg	1110		1.0	Yes	S4VEM
Magnesium	Spike	1030		mg/kg	1030		1.0	Yes	S4VEM
Sodium	Spike	1040		mg/kg	1040		1.0	Yes	S4VEM
Potassium	Spike	983		mg/kg	983		1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR0	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TA01SS	pH:		Sample Date:	02/25/2016	Sample Time:	12:59:00
% Moisture :				% Solids :	68.9		

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.061	JQ	mg/kg	0.061	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TA01SS	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	7200		mg/kg	7200		1.0	Yes	S4VEM
Antimony	Target	0.59	JQ	mg/kg	0.59	J*	1.0	Yes	S4VEM
Arsenic	Target	4.3		mg/kg	4.3		1.0	Yes	S4VEM
Barium	Target	64.9		mg/kg	64.9		1.0	Yes	S4VEM
Beryllium	Target	0.22	JQ	mg/kg	0.22	J	1.0	Yes	S4VEM
Cadmium	Target	0.87		mg/kg	0.87		1.0	Yes	S4VEM
Calcium	Target	5820		mg/kg	5820		1.0	Yes	S4VEM
Chromium	Target	18.8		mg/kg	18.8		1.0	Yes	S4VEM
Cobalt	Target	4.5	JQ	mg/kg	4.5	J	1.0	Yes	S4VEM
Copper	Target	30.4	JH	mg/kg	30.4	*	1.0	Yes	S4VEM
Iron	Target	11200		mg/kg	11200		1.0	Yes	S4VEM
Lead	Target	32.5		mg/kg	32.5		1.0	Yes	S4VEM
Magnesium	Target	3000		mg/kg	3000		1.0	Yes	S4VEM
Manganese	Target	212	JH	mg/kg	212	*	1.0	Yes	S4VEM
Nickel	Target	22.3		mg/kg	22.3		1.0	Yes	S4VEM
Potassium	Target	502	JQ	mg/kg	502	J	1.0	Yes	S4VEM
Selenium	Target	0.67	JQ	mg/kg	0.67	J	1.0	Yes	S4VEM
Silver	Target	1.1	U	mg/kg	0.27	J	1.0	Yes	S4VEM
Sodium	Target	198	JQ	mg/kg	198	J	1.0	Yes	S4VEM
Thallium	Target	0.49	JQ	mg/kg	0.49	J	1.0	Yes	S4VEM
Vanadium	Target	28.5		mg/kg	28.5		1.0	Yes	S4VEM
Zinc	Target	106		mg/kg	106		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0A	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	12.4		mg/kg	12.4		1.0	Yes	S4VEM
Copper	Spike	111		mg/kg	111		1.0	Yes	S4VEM
Manganese	Spike	641		mg/kg	641		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0D	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.058		mg/kg	0.058	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0D	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :	% Solids : 68.9		

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	7100		mg/kg	7100		1.0	Yes	S4VEM
Antimony	Target	0.59		mg/kg	0.59	J	1.0	Yes	S4VEM
Arsenic	Target	4.4		mg/kg	4.4		1.0	Yes	S4VEM
Barium	Target	64.7		mg/kg	64.7		1.0	Yes	S4VEM
Beryllium	Target	0.22		mg/kg	0.22	J	1.0	Yes	S4VEM
Cadmium	Target	0.87		mg/kg	0.87		1.0	Yes	S4VEM
Calcium	Target	5750		mg/kg	5750		1.0	Yes	S4VEM
Chromium	Target	18.7		mg/kg	18.7		1.0	Yes	S4VEM
Cobalt	Target	4.5		mg/kg	4.5	J	1.0	Yes	S4VEM
Copper	Target	30.1		mg/kg	30.1		1.0	Yes	S4VEM
Iron	Target	11100		mg/kg	11100		1.0	Yes	S4VEM
Lead	Target	32.0		mg/kg	32.0		1.0	Yes	S4VEM
Magnesium	Target	2960		mg/kg	2960		1.0	Yes	S4VEM
Manganese	Target	210		mg/kg	210		1.0	Yes	S4VEM
Nickel	Target	22.3		mg/kg	22.3		1.0	Yes	S4VEM
Potassium	Target	492		mg/kg	492	J	1.0	Yes	S4VEM
Selenium	Target	0.45		mg/kg	0.45	J	1.0	Yes	S4VEM
Silver	Target	0.27		mg/kg	0.27	J	1.0	Yes	S4VEM
Sodium	Target	196		mg/kg	196	J	1.0	Yes	S4VEM
Thallium	Target	2.7	U	mg/kg	2.7	U	1.0	Yes	S4VEM
Vanadium	Target	28.1		mg/kg	28.1		1.0	Yes	S4VEM
Zinc	Target	105		mg/kg	105		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0L	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	7110		mg/kg	7110		5.0	Yes	S4VEM
Antimony	Target	32.0	U	mg/kg	32.0	U	5.0	Yes	S4VEM
Arsenic	Target	5.5	U	mg/kg	5.5	U	5.0	Yes	S4VEM
Barium	Target	65.3	J	mg/kg	65.3	J	5.0	Yes	S4VEM
Beryllium	Target	0.22	J	mg/kg	0.22	J	5.0	Yes	S4VEM
Cadmium	Target	0.81	J	mg/kg	0.81	J	5.0	Yes	S4VEM
Calcium	Target	5840		mg/kg	5840		5.0	Yes	S4VEM
Chromium	Target	18.9		mg/kg	18.9		5.0	Yes	S4VEM
Cobalt	Target	4.2	J	mg/kg	4.2	J	5.0	Yes	S4VEM
Copper	Target	32.6		mg/kg	32.6		5.0	Yes	S4VEM
Iron	Target	11300		mg/kg	11300		5.0	Yes	S4VEM
Lead	Target	32.3		mg/kg	32.3		5.0	Yes	S4VEM
Magnesium	Target	2980		mg/kg	2980		5.0	Yes	S4VEM
Manganese	Target	215		mg/kg	215		5.0	Yes	S4VEM
Nickel	Target	22.0		mg/kg	22.0		5.0	Yes	S4VEM
Potassium	Target	445		mg/kg	445	J	5.0	Yes	S4VEM
Selenium	Target	19.0	U	mg/kg	19.0	U	5.0	Yes	S4VEM
Silver	Target	5.5	U	mg/kg	5.5	U	5.0	Yes	S4VEM
Sodium	Target	120	J	mg/kg	120	J	5.0	Yes	S4VEM
Thallium	Target	14.0	U	mg/kg	14.0	U	5.0	Yes	S4VEM
Vanadium	Target	28.3		mg/kg	28.3		5.0	Yes	S4VEM
Zinc	Target	105		mg/kg	105		5.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0S	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	11.5		mg/kg	11.5	*	1.0	Yes	S4VEM
Arsenic	Spike	12.7		mg/kg	12.7		1.0	Yes	S4VEM
Barium	Spike	526		mg/kg	526		1.0	Yes	S4VEM
Beryllium	Spike	10.3		mg/kg	10.3		1.0	Yes	S4VEM
Cadmium	Spike	11.1		mg/kg	11.1		1.0	Yes	S4VEM
Chromium	Spike	61.2		mg/kg	61.2		1.0	Yes	S4VEM
Cobalt	Spike	115		mg/kg	115		1.0	Yes	S4VEM
Copper	Spike	127		mg/kg	127	*	1.0	Yes	S4VEM
Lead	Spike	33.2		mg/kg	33.2		1.0	Yes	S4VEM
Manganese	Spike	381		mg/kg	381	*	1.0	Yes	S4VEM
Nickel	Spike	130		mg/kg	130		1.0	Yes	S4VEM
Selenium	Spike	11.6		mg/kg	11.6		1.0	Yes	S4VEM
Silver	Spike	10.5		mg/kg	10.5		1.0	Yes	S4VEM
Thallium	Spike	12.7		mg/kg	12.7		1.0	Yes	S4VEM
Vanadium	Spike	144		mg/kg	144		1.0	Yes	S4VEM
Zinc	Spike	199		mg/kg	199		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR0S	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date: 02/25/2016	Sample Time: 12:59:00
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Spike	0.71		mg/kg	0.71		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR1	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TA02SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:13:00
% Moisture :		% Solids : 88.7	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	4300		mg/kg	4300		1.0	Yes	S4VEM
Antimony	Target	4.9	UJL	mg/kg	4.9	U*	1.0	Yes	S4VEM
Arsenic	Target	2.1		mg/kg	2.1		1.0	Yes	S4VEM
Barium	Target	39.2		mg/kg	39.2		1.0	Yes	S4VEM
Beryllium	Target	0.13	JQ	mg/kg	0.13	J	1.0	Yes	S4VEM
Cadmium	Target	0.76		mg/kg	0.76		1.0	Yes	S4VEM
Calcium	Target	4070		mg/kg	4070		1.0	Yes	S4VEM
Chromium	Target	16.8		mg/kg	16.8		1.0	Yes	S4VEM
Cobalt	Target	2.8	JQ	mg/kg	2.8	J	1.0	Yes	S4VEM
Copper	Target	49.8	JH	mg/kg	49.8	*	1.0	Yes	S4VEM
Iron	Target	8810		mg/kg	8810		1.0	Yes	S4VEM
Lead	Target	29.7		mg/kg	29.7		1.0	Yes	S4VEM
Magnesium	Target	1680		mg/kg	1680		1.0	Yes	S4VEM
Manganese	Target	154	JH	mg/kg	154	*	1.0	Yes	S4VEM
Nickel	Target	12.1		mg/kg	12.1		1.0	Yes	S4VEM
Potassium	Target	420		mg/kg	420		1.0	Yes	S4VEM
Selenium	Target	0.87	JQ	mg/kg	0.87	J	1.0	Yes	S4VEM
Silver	Target	0.81	U	mg/kg	0.16	J	1.0	Yes	S4VEM
Sodium	Target	238	JQ	mg/kg	238	J	1.0	Yes	S4VEM
Thallium	Target	2.0	U	mg/kg	2.0	U	1.0	Yes	S4VEM
Vanadium	Target	15.9		mg/kg	15.9		1.0	Yes	S4VEM
Zinc	Target	98.5		mg/kg	98.5		1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR1	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TA02SS	pH:		Sample Date:	02/25/2016	Sample Time:	14:13:00
% Moisture :		% Solids :	88.7				

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.080	JQ	mg/kg	0.080	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR10	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 64.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	7340		mg/kg	7340		1.0	Yes	S4VEM
Antimony	Target	2.7	JQ	mg/kg	2.7	J*	1.0	Yes	S4VEM
Arsenic	Target	18.6		mg/kg	18.6		1.0	Yes	S4VEM
Barium	Target	154		mg/kg	154		1.0	Yes	S4VEM
Beryllium	Target	0.056	JQ	mg/kg	0.056	J	1.0	Yes	S4VEM
Cadmium	Target	2.8		mg/kg	2.8		1.0	Yes	S4VEM
Calcium	Target	21200		mg/kg	21200		1.0	Yes	S4VEM
Chromium	Target	23.4		mg/kg	23.4		1.0	Yes	S4VEM
Cobalt	Target	7.7		mg/kg	7.7		1.0	Yes	S4VEM
Copper	Target	120	JH	mg/kg	120	*	1.0	Yes	S4VEM
Iron	Target	13500		mg/kg	13500		1.0	Yes	S4VEM
Lead	Target	143		mg/kg	143		1.0	Yes	S4VEM
Magnesium	Target	3340		mg/kg	3340		1.0	Yes	S4VEM
Manganese	Target	5710	JH	mg/kg	5710	D*	10.0	Yes	S4VEM
Nickel	Target	28.0		mg/kg	28.0		1.0	Yes	S4VEM
Potassium	Target	829		mg/kg	829		1.0	Yes	S4VEM
Selenium	Target	0.70	JQ	mg/kg	0.70	J	1.0	Yes	S4VEM
Silver	Target	1.1	U	mg/kg	0.47	J	1.0	Yes	S4VEM
Sodium	Target	286	JQ	mg/kg	286	J	1.0	Yes	S4VEM
Thallium	Target	2.8	U	mg/kg	2.8	U	1.0	Yes	S4VEM
Vanadium	Target	28.4		mg/kg	28.4		1.0	Yes	S4VEM
Zinc	Target	531		mg/kg	531		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR10	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: TB01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:15:00
% Moisture :		% Solids : 64.4	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.10	JQ	mg/kg	0.10	J	1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR11	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TD01SS	pH:		Sample Date:	02/25/2016	Sample Time:	14:57:00
% Moisture :				% Solids :	22.9		

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.020	JQ	mg/kg	0.020	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR11	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TD01SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 22.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	1020		mg/kg	1020		1.0	Yes	S4VEM
Antimony	Target	6.0	UJL	mg/kg	6.0	U*	1.0	Yes	S4VEM
Arsenic	Target	0.99	U	mg/kg	0.99	U	1.0	Yes	S4VEM
Barium	Target	32.8		mg/kg	32.8		1.0	Yes	S4VEM
Beryllium	Target	0.065	JQ	mg/kg	0.065	J	1.0	Yes	S4VEM
Cadmium	Target	0.12	JQ	mg/kg	0.12	J	1.0	Yes	S4VEM
Calcium	Target	21300		mg/kg	21300		1.0	Yes	S4VEM
Chromium	Target	1.6		mg/kg	1.6		1.0	Yes	S4VEM
Cobalt	Target	0.68	JQ	mg/kg	0.68	J	1.0	Yes	S4VEM
Copper	Target	15.5	JH	mg/kg	15.5	*	1.0	Yes	S4VEM
Iron	Target	1770		mg/kg	1770		1.0	Yes	S4VEM
Lead	Target	0.90	JQ	mg/kg	0.90	J	1.0	Yes	S4VEM
Magnesium	Target	7910		mg/kg	7910		1.0	Yes	S4VEM
Manganese	Target	124	JH	mg/kg	124	*	1.0	Yes	S4VEM
Nickel	Target	1.7	JQ	mg/kg	1.7	J	1.0	Yes	S4VEM
Potassium	Target	2190		mg/kg	2190		1.0	Yes	S4VEM
Selenium	Target	0.47	JQ	mg/kg	0.47	J	1.0	Yes	S4VEM
Silver	Target	0.99	U	mg/kg	0.99	U	1.0	Yes	S4VEM
Sodium	Target	660		mg/kg	660		1.0	Yes	S4VEM
Thallium	Target	2.5	U	mg/kg	2.5	U	1.0	Yes	S4VEM
Vanadium	Target	2.3	JQ	mg/kg	2.3	J	1.0	Yes	S4VEM
Zinc	Target	28.1		mg/kg	28.1		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR12	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 88.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.057	JQ	mg/kg	0.057	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR12	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TD02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:24:00
% Moisture :		% Solids : 88.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	9520		mg/kg	9520		1.0	Yes	S4VEM
Antimony	Target	1.5	JQ	mg/kg	1.5	J*	1.0	Yes	S4VEM
Arsenic	Target	5.8		mg/kg	5.8		1.0	Yes	S4VEM
Barium	Target	55.7		mg/kg	55.7		1.0	Yes	S4VEM
Beryllium	Target	0.33	JQ	mg/kg	0.33	J	1.0	Yes	S4VEM
Cadmium	Target	2.6		mg/kg	2.6		1.0	Yes	S4VEM
Calcium	Target	5800		mg/kg	5800		1.0	Yes	S4VEM
Chromium	Target	22.6		mg/kg	22.6		1.0	Yes	S4VEM
Cobalt	Target	7.0		mg/kg	7.0		1.0	Yes	S4VEM
Copper	Target	55.5	JH	mg/kg	55.5	*	1.0	Yes	S4VEM
Iron	Target	27100		mg/kg	27100		1.0	Yes	S4VEM
Lead	Target	60.0		mg/kg	60.0		1.0	Yes	S4VEM
Magnesium	Target	3330		mg/kg	3330		1.0	Yes	S4VEM
Manganese	Target	333	JH	mg/kg	333	*	1.0	Yes	S4VEM
Nickel	Target	23.6		mg/kg	23.6		1.0	Yes	S4VEM
Potassium	Target	551		mg/kg	551		1.0	Yes	S4VEM
Selenium	Target	0.87	JQ	mg/kg	0.87	J	1.0	Yes	S4VEM
Silver	Target	0.79	U	mg/kg	0.23	J	1.0	Yes	S4VEM
Sodium	Target	276	JQ	mg/kg	276	J	1.0	Yes	S4VEM
Thallium	Target	0.92	JQ	mg/kg	0.92	J	1.0	Yes	S4VEM
Vanadium	Target	29.9		mg/kg	29.9		1.0	Yes	S4VEM
Zinc	Target	238		mg/kg	238		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR13	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TD03SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:42:00
% Moisture :		% Solids : 56.8	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	7210		mg/kg	7210		1.0	Yes	S4VEM
Antimony	Target	1.3	JQ	mg/kg	1.3	J*	1.0	Yes	S4VEM
Arsenic	Target	12.4		mg/kg	12.4		1.0	Yes	S4VEM
Barium	Target	98.9		mg/kg	98.9		1.0	Yes	S4VEM
Beryllium	Target	0.21	JQ	mg/kg	0.21	J	1.0	Yes	S4VEM
Cadmium	Target	0.69		mg/kg	0.69		1.0	Yes	S4VEM
Calcium	Target	16400		mg/kg	16400		1.0	Yes	S4VEM
Chromium	Target	26.5		mg/kg	26.5		1.0	Yes	S4VEM
Cobalt	Target	4.2	JQ	mg/kg	4.2	J	1.0	Yes	S4VEM
Copper	Target	42.1	JH	mg/kg	42.1	*	1.0	Yes	S4VEM
Iron	Target	10400		mg/kg	10400		1.0	Yes	S4VEM
Lead	Target	42.2		mg/kg	42.2		1.0	Yes	S4VEM
Magnesium	Target	3000		mg/kg	3000		1.0	Yes	S4VEM
Manganese	Target	245	JH	mg/kg	245	*	1.0	Yes	S4VEM
Nickel	Target	19.1		mg/kg	19.1		1.0	Yes	S4VEM
Potassium	Target	754		mg/kg	754		1.0	Yes	S4VEM
Selenium	Target	1.1	JQ	mg/kg	1.1	J	1.0	Yes	S4VEM
Silver	Target	1.3	U	mg/kg	0.16	J	1.0	Yes	S4VEM
Sodium	Target	205	JQ	mg/kg	205	J	1.0	Yes	S4VEM
Thallium	Target	3.1	U	mg/kg	3.1	U	1.0	Yes	S4VEM
Vanadium	Target	24.3		mg/kg	24.3		1.0	Yes	S4VEM
Zinc	Target	153		mg/kg	153		1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR13	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TD03SS	pH:		Sample Date:	02/25/2016	Sample Time:	15:42:00
% Moisture :				% Solids :	56.8		

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.12	JQ	mg/kg	0.12	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR14	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TD04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids : 42.1	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	8520		mg/kg	8520		1.0	Yes	S4VEM
Antimony	Target	1.8	JQ	mg/kg	1.8	J*	1.0	Yes	S4VEM
Arsenic	Target	10.4		mg/kg	10.4		1.0	Yes	S4VEM
Barium	Target	113		mg/kg	113		1.0	Yes	S4VEM
Beryllium	Target	0.26	JQ	mg/kg	0.26	J	1.0	Yes	S4VEM
Cadmium	Target	0.81	JQ	mg/kg	0.81	J	1.0	Yes	S4VEM
Calcium	Target	22500		mg/kg	22500		1.0	Yes	S4VEM
Chromium	Target	34.8		mg/kg	34.8		1.0	Yes	S4VEM
Cobalt	Target	5.5	JQ	mg/kg	5.5	J	1.0	Yes	S4VEM
Copper	Target	50.0	JH	mg/kg	50.0	*	1.0	Yes	S4VEM
Iron	Target	12600		mg/kg	12600		1.0	Yes	S4VEM
Lead	Target	52.9		mg/kg	52.9		1.0	Yes	S4VEM
Magnesium	Target	3660		mg/kg	3660		1.0	Yes	S4VEM
Manganese	Target	318	JH	mg/kg	318	*	1.0	Yes	S4VEM
Nickel	Target	23.1		mg/kg	23.1		1.0	Yes	S4VEM
Potassium	Target	918		mg/kg	918		1.0	Yes	S4VEM
Selenium	Target	1.7	JQ	mg/kg	1.7	J	1.0	Yes	S4VEM
Silver	Target	1.7	U	mg/kg	0.26	J	1.0	Yes	S4VEM
Sodium	Target	237	JQ	mg/kg	237	J	1.0	Yes	S4VEM
Thallium	Target	4.2	U	mg/kg	4.2	U	1.0	Yes	S4VEM
Vanadium	Target	30.3		mg/kg	30.3		1.0	Yes	S4VEM
Zinc	Target	193		mg/kg	193		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR14	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: ID04SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:03:00
% Moisture :		% Solids :	42.1

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.22	JQ	mg/kg	0.22	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR15	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 89.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.042	JQ	mg/kg	0.042	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR15	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TB02SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:55:00
% Moisture :		% Solids : 89.6	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	15000		mg/kg	15000		1.0	Yes	S4VEM
Antimony	Target	0.60	JQ	mg/kg	0.60	J*	1.0	Yes	S4VEM
Arsenic	Target	3.4		mg/kg	3.4		1.0	Yes	S4VEM
Barium	Target	109		mg/kg	109		1.0	Yes	S4VEM
Beryllium	Target	0.32	JQ	mg/kg	0.32	J	1.0	Yes	S4VEM
Cadmium	Target	1.3		mg/kg	1.3		1.0	Yes	S4VEM
Calcium	Target	8840		mg/kg	8840		1.0	Yes	S4VEM
Chromium	Target	32.4		mg/kg	32.4		1.0	Yes	S4VEM
Cobalt	Target	11.0		mg/kg	11.0		1.0	Yes	S4VEM
Copper	Target	61.0	JH	mg/kg	61.0	*	1.0	Yes	S4VEM
Iron	Target	21200		mg/kg	21200		1.0	Yes	S4VEM
Lead	Target	68.5		mg/kg	68.5		1.0	Yes	S4VEM
Magnesium	Target	8220		mg/kg	8220		1.0	Yes	S4VEM
Manganese	Target	336	JH	mg/kg	336	*	1.0	Yes	S4VEM
Nickel	Target	27.9		mg/kg	27.9		1.0	Yes	S4VEM
Potassium	Target	1210		mg/kg	1210		1.0	Yes	S4VEM
Selenium	Target	0.76	JQ	mg/kg	0.76	J	1.0	Yes	S4VEM
Silver	Target	0.85	U	mg/kg	0.22	J	1.0	Yes	S4VEM
Sodium	Target	438		mg/kg	438		1.0	Yes	S4VEM
Thallium	Target	0.76	JQ	mg/kg	0.76	J	1.0	Yes	S4VEM
Vanadium	Target	39.9		mg/kg	39.9		1.0	Yes	S4VEM
Zinc	Target	118		mg/kg	118		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR16	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids : 92.3	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	10300		mg/kg	10300		1.0	Yes	S4VEM
Antimony	Target	0.87	JQ	mg/kg	0.87	J*	1.0	Yes	S4VEM
Arsenic	Target	4.3		mg/kg	4.3		1.0	Yes	S4VEM
Barium	Target	80.8		mg/kg	80.8		1.0	Yes	S4VEM
Beryllium	Target	0.29	JQ	mg/kg	0.29	J	1.0	Yes	S4VEM
Cadmium	Target	12.0		mg/kg	12.0		1.0	Yes	S4VEM
Calcium	Target	5270		mg/kg	5270		1.0	Yes	S4VEM
Chromium	Target	51.6		mg/kg	51.6		1.0	Yes	S4VEM
Cobalt	Target	9.7		mg/kg	9.7		1.0	Yes	S4VEM
Copper	Target	80.3	JH	mg/kg	80.3	*	1.0	Yes	S4VEM
Iron	Target	22400		mg/kg	22400		1.0	Yes	S4VEM
Lead	Target	155		mg/kg	155		1.0	Yes	S4VEM
Magnesium	Target	6410		mg/kg	6410		1.0	Yes	S4VEM
Manganese	Target	315	JH	mg/kg	315	*	1.0	Yes	S4VEM
Nickel	Target	25.4		mg/kg	25.4		1.0	Yes	S4VEM
Potassium	Target	637		mg/kg	637		1.0	Yes	S4VEM
Selenium	Target	3.3		mg/kg	3.3		1.0	Yes	S4VEM
Silver	Target	0.81	U	mg/kg	0.19	J	1.0	Yes	S4VEM
Sodium	Target	415		mg/kg	415		1.0	Yes	S4VEM
Thallium	Target	0.63	JQ	mg/kg	0.63	J	1.0	Yes	S4VEM
Vanadium	Target	38.8		mg/kg	38.8		1.0	Yes	S4VEM
Zinc	Target	163		mg/kg	163		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR16	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: TB03SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:50:00
% Moisture :		% Solids :	92.3

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.050	JQ	mg/kg	0.050	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR2	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TA03SS	pH:	Sample Date: 02/25/2016	Sample Time: 14:57:00
% Moisture :		% Solids : 48.5	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	13300		mg/kg	13300		1.0	Yes	S4VEM
Antimony	Target	0.63	JQ	mg/kg	0.63	J*	1.0	Yes	S4VEM
Arsenic	Target	7.0		mg/kg	7.0		1.0	Yes	S4VEM
Barium	Target	109		mg/kg	109		1.0	Yes	S4VEM
Beryllium	Target	0.46	JQ	mg/kg	0.46	J	1.0	Yes	S4VEM
Cadmium	Target	0.82		mg/kg	0.82		1.0	Yes	S4VEM
Calcium	Target	10000		mg/kg	10000		1.0	Yes	S4VEM
Chromium	Target	25.9		mg/kg	25.9		1.0	Yes	S4VEM
Cobalt	Target	7.7		mg/kg	7.7		1.0	Yes	S4VEM
Copper	Target	36.9	JH	mg/kg	36.9	*	1.0	Yes	S4VEM
Iron	Target	18900		mg/kg	18900		1.0	Yes	S4VEM
Lead	Target	31.4		mg/kg	31.4		1.0	Yes	S4VEM
Magnesium	Target	3630		mg/kg	3630		1.0	Yes	S4VEM
Manganese	Target	420	JH	mg/kg	420	*	1.0	Yes	S4VEM
Nickel	Target	21.2		mg/kg	21.2		1.0	Yes	S4VEM
Potassium	Target	1160		mg/kg	1160		1.0	Yes	S4VEM
Selenium	Target	0.77	JQ	mg/kg	0.77	J	1.0	Yes	S4VEM
Silver	Target	1.5	U	mg/kg	0.23	J	1.0	Yes	S4VEM
Sodium	Target	160	JQ	mg/kg	160	J	1.0	Yes	S4VEM
Thallium	Target	0.91	JQ	mg/kg	0.91	J	1.0	Yes	S4VEM
Vanadium	Target	47.3		mg/kg	47.3		1.0	Yes	S4VEM
Zinc	Target	123		mg/kg	123		1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR2	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TA03SS	pH:		Sample Date:	02/25/2016	Sample Time:	14:57:00
% Moisture :		% Solids :	48.5				

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.19		mg/kg	0.19		1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR3	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TA04SS	pH:		Sample Date:	02/25/2016	Sample Time:	15:34:00
% Moisture :		% Solids :	68				

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.13	JQ	mg/kg	0.13	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR3	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TA04SS	pH:	Sample Date: 02/25/2016	Sample Time: 15:34:00
% Moisture :		% Solids : 68	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	9980		mg/kg	9980		1.0	Yes	S4VEM
Antimony	Target	0.78	JQ	mg/kg	0.78	J*	1.0	Yes	S4VEM
Arsenic	Target	8.6		mg/kg	8.6		1.0	Yes	S4VEM
Barium	Target	72.7		mg/kg	72.7		1.0	Yes	S4VEM
Beryllium	Target	0.31	JQ	mg/kg	0.31	J	1.0	Yes	S4VEM
Cadmium	Target	0.67		mg/kg	0.67		1.0	Yes	S4VEM
Calcium	Target	5970		mg/kg	5970		1.0	Yes	S4VEM
Chromium	Target	26.4		mg/kg	26.4		1.0	Yes	S4VEM
Cobalt	Target	6.5		mg/kg	6.5		1.0	Yes	S4VEM
Copper	Target	30.1	JH	mg/kg	30.1	*	1.0	Yes	S4VEM
Iron	Target	15600		mg/kg	15600		1.0	Yes	S4VEM
Lead	Target	23.2		mg/kg	23.2		1.0	Yes	S4VEM
Magnesium	Target	4760		mg/kg	4760		1.0	Yes	S4VEM
Manganese	Target	338	JH	mg/kg	338	*	1.0	Yes	S4VEM
Nickel	Target	24.3		mg/kg	24.3		1.0	Yes	S4VEM
Potassium	Target	796		mg/kg	796		1.0	Yes	S4VEM
Selenium	Target	1.3	JQ	mg/kg	1.3	J	1.0	Yes	S4VEM
Silver	Target	1.0	U	mg/kg	0.25	J	1.0	Yes	S4VEM
Sodium	Target	147	JQ	mg/kg	147	J	1.0	Yes	S4VEM
Thallium	Target	0.84	JQ	mg/kg	0.84	J	1.0	Yes	S4VEM
Vanadium	Target	35.1		mg/kg	35.1		1.0	Yes	S4VEM
Zinc	Target	103		mg/kg	103		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR4	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TA05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:09:00
% Moisture :		% Solids : 68.9	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	19100		mg/kg	19100		1.0	Yes	S4VEM
Antimony	Target	0.65	JQ	mg/kg	0.65	J*	1.0	Yes	S4VEM
Arsenic	Target	10.6		mg/kg	10.6		1.0	Yes	S4VEM
Barium	Target	156		mg/kg	156		1.0	Yes	S4VEM
Beryllium	Target	0.54		mg/kg	0.54		1.0	Yes	S4VEM
Cadmium	Target	0.94		mg/kg	0.94		1.0	Yes	S4VEM
Calcium	Target	5760		mg/kg	5760		1.0	Yes	S4VEM
Chromium	Target	31.6		mg/kg	31.6		1.0	Yes	S4VEM
Cobalt	Target	11.4		mg/kg	11.4		1.0	Yes	S4VEM
Copper	Target	57.4	JH	mg/kg	57.4	*	1.0	Yes	S4VEM
Iron	Target	25100		mg/kg	25100		1.0	Yes	S4VEM
Lead	Target	15.7		mg/kg	15.7		1.0	Yes	S4VEM
Magnesium	Target	6960		mg/kg	6960		1.0	Yes	S4VEM
Manganese	Target	491	JH	mg/kg	491	*	1.0	Yes	S4VEM
Nickel	Target	28.5		mg/kg	28.5		1.0	Yes	S4VEM
Potassium	Target	3000		mg/kg	3000		1.0	Yes	S4VEM
Selenium	Target	0.52	JQ	mg/kg	0.52	J	1.0	Yes	S4VEM
Silver	Target	1.1	U	mg/kg	0.23	J	1.0	Yes	S4VEM
Sodium	Target	211	JQ	mg/kg	211	J	1.0	Yes	S4VEM
Thallium	Target	1.7	JQ	mg/kg	1.7	J	1.0	Yes	S4VEM
Vanadium	Target	54.7		mg/kg	54.7		1.0	Yes	S4VEM
Zinc	Target	83.3		mg/kg	83.3		1.0	Yes	S4VEM

Case No:	46026	Contract:	EPW14030	SDG No:	MJHFR0	Lab Code:	CHM
Sample Number:	MJHFR4	Method:	Mercury by Cold Vapor	Matrix:	Soil	MA Number:	
Sample Location:	TA05SS	pH:		Sample Date:	02/25/2016	Sample Time:	16:09:00
% Moisture :		% Solids :	68.9				

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.094	JQ	mg/kg	0.094	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR9	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 71	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.081	JQ	mg/kg	0.081	J	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: MJHFR9	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location: TD05SS	pH:	Sample Date: 02/25/2016	Sample Time: 16:47:00
% Moisture :		% Solids : 71	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	15500		mg/kg	15500		1.0	Yes	S4VEM
Antimony	Target	0.47	JQ	mg/kg	0.47	J*	1.0	Yes	S4VEM
Arsenic	Target	7.6		mg/kg	7.6		1.0	Yes	S4VEM
Barium	Target	123		mg/kg	123		1.0	Yes	S4VEM
Beryllium	Target	0.40	JQ	mg/kg	0.40	J	1.0	Yes	S4VEM
Cadmium	Target	0.60		mg/kg	0.60		1.0	Yes	S4VEM
Calcium	Target	3220		mg/kg	3220		1.0	Yes	S4VEM
Chromium	Target	19.5		mg/kg	19.5		1.0	Yes	S4VEM
Cobalt	Target	5.6		mg/kg	5.6		1.0	Yes	S4VEM
Copper	Target	15.5	JH	mg/kg	15.5	*	1.0	Yes	S4VEM
Iron	Target	15100		mg/kg	15100		1.0	Yes	S4VEM
Lead	Target	17.0		mg/kg	17.0		1.0	Yes	S4VEM
Magnesium	Target	2380		mg/kg	2380		1.0	Yes	S4VEM
Manganese	Target	883	JH	mg/kg	883	*	1.0	Yes	S4VEM
Nickel	Target	18.1		mg/kg	18.1		1.0	Yes	S4VEM
Potassium	Target	604		mg/kg	604		1.0	Yes	S4VEM
Selenium	Target	0.77	JQ	mg/kg	0.77	J	1.0	Yes	S4VEM
Silver	Target	0.98	U	mg/kg	0.20	J	1.0	Yes	S4VEM
Sodium	Target	70.6	JQ	mg/kg	70.6	J	1.0	Yes	S4VEM
Thallium	Target	1.1	JQ	mg/kg	1.1	J	1.0	Yes	S4VEM
Vanadium	Target	34.9		mg/kg	34.9		1.0	Yes	S4VEM
Zinc	Target	47.0		mg/kg	47.0		1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: PBS002	Method: Metals by ICP-AES	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	2.6	J	mg/kg	2.6	J	1.0	Yes	S4VEM
Antimony	Target	6.0	U	mg/kg	6.0	U	1.0	Yes	S4VEM
Arsenic	Target	1.0	U	mg/kg	1.0	U	1.0	Yes	S4VEM
Barium	Target	20.0	U	mg/kg	20.0	U	1.0	Yes	S4VEM
Beryllium	Target	0.50	U	mg/kg	0.50	U	1.0	Yes	S4VEM
Cadmium	Target	0.50	U	mg/kg	0.50	U	1.0	Yes	S4VEM
Calcium	Target	500	U	mg/kg	500	U	1.0	Yes	S4VEM
Chromium	Target	1.0	U	mg/kg	1.0	U	1.0	Yes	S4VEM
Cobalt	Target	5.0	U	mg/kg	5.0	U	1.0	Yes	S4VEM
Copper	Target	0.53	J	mg/kg	0.53	J	1.0	Yes	S4VEM
Iron	Target	3.2	J	mg/kg	3.2	J	1.0	Yes	S4VEM
Lead	Target	1.0	U	mg/kg	1.0	U	1.0	Yes	S4VEM
Magnesium	Target	500	U	mg/kg	500	U	1.0	Yes	S4VEM
Manganese	Target	1.5	U	mg/kg	1.5	U	1.0	Yes	S4VEM
Nickel	Target	4.0	U	mg/kg	4.0	U	1.0	Yes	S4VEM
Potassium	Target	500	U	mg/kg	-51	J	1.0	Yes	S4VEM
Selenium	Target	3.5	U	mg/kg	3.5	U	1.0	Yes	S4VEM
Silver	Target	1.0	U	mg/kg	1.0	U	1.0	Yes	S4VEM
Sodium	Target	500	U	mg/kg	-17	J	1.0	Yes	S4VEM
Thallium	Target	2.5	U	mg/kg	2.5	U	1.0	Yes	S4VEM
Vanadium	Target	5.0	U	mg/kg	5.0	U	1.0	Yes	S4VEM
Zinc	Target	6.0	U	mg/kg	6.0	U	1.0	Yes	S4VEM

Case No: 46026	Contract: EPW14030	SDG No: MJHFR0	Lab Code: CHM
Sample Number: PBS004	Method: Mercury by Cold Vapor	Matrix: Soil	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids : 100	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.094	U	mg/kg	0.094	U	1.0	Yes	S4VEM

Edit History Report

Case No: 46026
Contract: EPW14030
SDG No: MJHFR0
Lab Code: CHM

Method: Metals by ICP-AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
LCS002	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Cobalt	Validation Flag	J	JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:07 PM	
MJHFR0	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:07 PM	
MJHFR0	Soil	Potassium	Validation Flag		JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:48 PM	
MJHFR0A	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0D	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0L	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0S	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR1	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR1	Soil	Antimony	Validation Flag	UJ	UJL	Don Matheny	3/30/16 12:54 PM	
MJHFR1	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:49 PM	
MJHFR1	Soil	Cobalt	Validation Flag	J	JQ	Don Matheny	3/28/16 12:49 PM	
MJHFR1	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 12:54 PM	
MJHFR1	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:49 PM	
MJHFR1	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 12:54 PM	
MJHFR1	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:49 PM	
MJHFR1	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:49 PM	
MJHFR1	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:49 PM	
MJHFR10	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR10	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR10	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR10	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:09 PM	
MJHFR10	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:50 PM	
MJHFR10	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:09 PM	
MJHFR10	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR10	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:50 PM	
MJHFR10	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJHFR11	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR11	Soil	Antimony	Validation Flag	UJ	UJL	Don Matheny	3/30/16 1:08 PM	
MJHFR11	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Cadmium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Cobalt	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:08 PM	
MJHFR11	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Lead	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:08 PM	
MJHFR11	Soil	Nickel	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR11	Soil	Vanadium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:50 PM	
MJHFR12	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR12	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR12	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR12	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:08 PM	
MJHFR12	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:51 PM	
MJHFR12	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:08 PM	
MJHFR12	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR12	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:51 PM	
MJHFR12	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR12	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR13	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil	Cobalt	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:07 PM	
MJHFR13	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:07 PM	
MJHFR13	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:51 PM	
MJHFR13	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:51 PM	
MJHFR14	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR14	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Cadmium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Cobalt	Validation Flag	J	JQ	Don Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:12 PM	
MJHFR14	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:12 PM	
MJHFR14	Soil	Selenium	Validation	J	JQ	Don	3/28/16 12:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJHFR14	Soil	Selenium	Flag	J	JQ	Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:52 PM	
MJHFR14	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:52 PM	
MJHFR15	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR15	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR15	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR15	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 12:54 PM	
MJHFR15	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:53 PM	
MJHFR15	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 12:54 PM	
MJHFR15	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR15	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:53 PM	
MJHFR15	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR16	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR16	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR16	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR16	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:14 PM	
MJHFR16	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:53 PM	
MJHFR16	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:14 PM	
MJHFR16	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:53 PM	
MJHFR16	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:53 PM	
MJHFR2	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR2	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR2	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR2	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:13 PM	
MJHFR2	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:54 PM	
MJHFR2	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:13 PM	
MJHFR2	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR2	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:54 PM	
MJHFR2	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR2	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR3	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:07 PM	
MJHFR3	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:07 PM	
MJHFR3	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR3	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:54 PM	
MJHFR4	Soil		Validation		S4VEM	Don	3/29/16 1:41 PM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJHFR4	Soil		Level		S4VEM	Matheny	3/29/16 1:41 PM	Y
MJHFR4	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR4	Soil	Copper	Validation Flag	JL	JH	Don Matheny	3/30/16 1:08 PM	
MJHFR4	Soil	Copper	Validation Flag	J	JL	Don Matheny	3/30/16 1:08 PM	
MJHFR4	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:55 PM	
MJHFR4	Soil	Manganese	Validation Flag	JL	JH	Don Matheny	3/30/16 1:08 PM	
MJHFR4	Soil	Manganese	Validation Flag	J	JL	Don Matheny	3/30/16 1:08 PM	
MJHFR4	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR4	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:55 PM	
MJHFR4	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR4	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR9	Soil	Antimony	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil	Beryllium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil	Copper	Validation Flag	J	JH	Don Matheny	3/30/16 1:13 PM	
MJHFR9	Soil	Copper	Validation Flag		J	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil	Manganese	Validation Flag	J	JH	Don Matheny	3/30/16 1:13 PM	
MJHFR9	Soil	Selenium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil	Silver	Validation Flag	UJ	U	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil	Sodium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
MJHFR9	Soil	Thallium	Validation Flag	J	JQ	Don Matheny	3/28/16 12:55 PM	
PBS002	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
PBS002	Soil	Potassium	Validated Result	-51	500	Don Matheny	3/28/16 11:46 AM	
PBS002	Soil	Potassium	Validation Flag		U	Don Matheny	3/28/16 11:46 AM	
PBS002	Soil	Sodium	Validated Result	-17	500	Don Matheny	3/28/16 11:46 AM	
PBS002	Soil	Sodium	Validation Flag		U	Don Matheny	3/28/16 11:46 AM	

Method: Mercury by Cold Vapor

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJHFR0	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR0D	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR0S	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR1	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR1	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:58 PM	
MJHFR10	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR10	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR11	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR11	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:56 PM	
MJHFR12	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR12	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR13	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR13	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR14	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR14	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR15	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR15	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR16	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR16	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR2	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR3	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR3	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:56 PM	
MJHFR4	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR4	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
MJHFR9	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y
MJHFR9	Soil	Mercury	Validation Flag	J	JQ	Don Matheny	3/28/16 12:57 PM	
PBS004	Soil		Validation Level		S4VEM	Don Matheny	3/29/16 1:41 PM	Y

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MEMORANDUM

DATE: July 4, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Organic Data Summary Check, May Creek Landfill Site, Renton, Washington**

REF: TDD: 16-02-0007 PAN: 1004530.0004.145.01

The data summary check of 1 liquid sample collected from the May Creek Landfill site located in Renton, Washington has been completed. pH (EPA method 9040C) and metals (EPA method 6010B) analyses were performed following EPA and laboratory guidelines at the Manchester Environmental Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Manual Process (S4VM).

The sample was numbered: 16084624

The secondary reviewer added the bias qualifiers H (high bias), K (unknown bias), and/or L (low bias) to applicable estimated results as indicated in the data validation memorandum.

No discrepancies were noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganics Results from the Region 10
USEPA Laboratory

PROJECT NAME: May Creek Landfill Removal Assessment

PROJECT CODE: SFP-104A

FROM: Gerald Dodo, Supervisory Chemist
USEPA Region 10 Laboratory
Office of Environmental Assessment

TO: Jeffrey Fowlow, On Scene Coordinator
Office of Environmental Cleanup
US EPA Region 10

CC: Renee Nordeen, E&E

I have authorized release of this data package. Attached you will find the pH and metals results for the May Creek Landfill Removal Assessment project for the samples received on 03/03/2016. For further information regarding the attached data, contact Katie Adams at 360-871-8748.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

**QUALITY ASSURANCE MEMORANDUM
FOR INORGANIC CHEMICAL ANALYSES**

DATE: June 30, 2016

TO: Jeff Fowlow, Project Manager
Office of Compliance and Enforcement, US EPA Region 10

From: Theresa McBride, Chemist
Office of Environmental Review and Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of pH and Metals
For May Creek Landfill

Project Code: SFP-104A
Account Code: 2016T10P303DD210ZZLA00

CC: Renee Nordeen, E&E

The following is a quality assurance review of the results of the analysis of 1 liquid sample for pH and Metals. This sample was submitted for the May Creek Landfill Project. The analyses were performed by EPA chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following sample: 16084624

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). Method excursions were required due to the limited sample volume available. The excursion is discussed in the Sample Preparation and Matrix Spike/Matrix Spike Duplicate Analysis sections, below.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "Laboratory/QAPP Criteria Not Met". Additional information which may affect data usage is discussed in a "NOTE:" which concludes the affected section.

For those tests for which the USEPA Region 10 Laboratory has been accredited by The NELAC Institute (TNI), all requirements of the current TNI Standard have been met.

1. Sample Transport and Receipt

Upon sample receipt, all conditions met Laboratory/QAPP requirements for this project. These samples were stored in locked storage or in direct possession of the responsible analyst for the entire time they were held at the Region 10 Laboratory.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples. The samples covered by this review met method holding time recommendations as applied to waste samples.

3. Sample Preparation -Laboratory/QAPP Criteria Not Met

The usual procedure for sample preservation for metals is to acidify the sample to pH<2 in the original sample container (and allow the sample to remain in the container for 16-24 hours prior to subsampling). This is to ensure that metals that may be adsorbed on the container walls are resuspended. The sample could not be preserved in the original container without modifying the sample for the possibility of future analyses; therefore aliquots were removed for analysis, and these aliquots were acidified. This excursion may have introduced low bias by failing to suspend metals that were adsorbed to the container walls.

Samples were prepared according to the method outlined in the SOP for these analytes in this type of matrix. No qualification of the data was required based on sample preparation.

Note: Samples were prepared for metals analysis with reduced volume due to the limited volume of sample available.

4. Initial Calibration and Calibration Verification -Laboratory/QAPP Criteria Not Met

All instrument calibrations met method criteria.

For pH analysis, all calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification.

For Metals analysis, the calibration verification standards for aluminum, calcium, and vanadium drifted out of control after the introduction of the sample to the instrument (the nature of the sample impacted instrument performance). QC results were in some cases as low as 85%, when the acceptance limits are 90-110%. All results for these elements were qualified (J), estimated, to reflect a possible low bias. No additional qualification was required.

5. Laboratory Control Samples -Laboratory/QAPP Criteria Not Met

Laboratory control samples for pH met method requirements.

Laboratory control sample for metals met the 85-115% recovery acceptance criteria for the method with the exception of thallium (77%/80%). All thallium results were qualified (J), estimated, to reflect a possible low bias.

No additional qualification was required based on laboratory control sample analysis.

6. Blank Analysis

Blank analysis is not relevant to pH analysis.

The metals method blank did not contain detectable levels of analyte which would require data qualification.

7. Internal Standards

All metals internal standards met instrument response criteria.

8. Duplicate Analysis

Duplicate analysis was performed on sample 16084624. Sample duplicate results met all method requirements. No qualification was required based on duplicate analysis.

Note: For pH analysis, only the second analysis (the duplicate) is reported, per method requirements.

9. Matrix Spike/Matrix Spike Duplicate Analysis -Laboratory/QAPP Criteria Not Met

Matrix spike analysis is not relevant to pH analysis.

A matrix spike analysis for metals was performed on sample 16084624. A matrix spike duplicate was not performed due to the limited sample volume available. For results where the spike added was less than one-fourth of the native sample concentration (and thus difficult to effectively evaluate), spike results were designated "NA" with no numerical value given. Applicable spike results were within the 75-125% recovery requirements, with the exception of thallium (72%). All thallium results were qualified (J), estimated, to reflect a possible low bias. No additional qualification was required based on matrix spike analyses.

10. Interferences

pH samples with values greater than 10 must be measured for sodium content, and the pH values corrected for sodium error according to the probe properties established by the manufacturer. The sodium results obtained from the metals analysis were used for this purpose.

For the metals analysis, serial dilution and inter-element correction checks were analyzed to demonstrate that interferences were under control. All results of these checks met laboratory acceptance criteria.

11. Reporting Limits

All sample results that fall below the MRL are assigned the value of the MRL and the 'U' qualifier is attached. MRL values for some analytes have been elevated to reflect dilutions which were performed to mitigate interferences, or to bring analyte concentrations within the method calibration range.

For metals analysis, sample results above the MRL but below the LRS are reported to two significant figures; results above the LRS level are reported to three significant figures.

12. Data Qualifiers

The (U) qualifier was attached to all sample results that fall below the MRL.

The (J) qualifier was attached to the aluminum, calcium, and vanadium results due to calibration verification failures that resulted from instrument drift after contact with the sample. The (J) qualifier was also added to all thallium results due to low recoveries of laboratory control samples and the matrix spike.

Below are the definitions for the codes used qualifying data from these analyses. When more than one quality issue was involved, the most restrictive qualifier has been attached to the data.

- U - The analyte was not detected at or above the reported value.
- J - The identification of the analyte is acceptable; however the reported value is an estimate.
- UJ - The analyte was not detected at or above the reported value. The reported value is an estimate.
- NA - Not Applicable; the parameter was not included in the analysis, or there is no analytical result for this parameter.
No value is reported with this qualification.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Katie Adams at the Region 10 Laboratory, phone number (360) 871-8748.

13. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DU), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards – Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) – a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Low Range Standard (LRS) – A level (often 5 times the MRL) where it has been demonstrated that the instrument achieves defined levels of accuracy and precision (more stringent than at the MRL), as checked with the Low Range Standard during analysis.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analytes and the percent recoveries of the analytes are determined.

Method Blank – An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) – the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

US EPA Region 10 Laboratory

Multi-Sample Final Report



Project Code : SFP-104A

Site : MAY CREEK LANDFILL RA

Contact : Jeff Fowlow

Account : 2016T10P303DD210ZZLA00

Parameter(s): pH

Analyte: *90075 - pH

Weight Basis : N/A

Prep Method(s): 9040C - pH Electrometric Measurement

Analytical Method: 9040C - pH Electrometric Measurement

Target Analyte Results:

Sample	Information	Lab Matrix	Result	Unit	Qual.	Analysis Date	Dilution
16084624 sam	TB03DR	Liquid	12.3	pH		5/27/16	1

Spiked Compounds:

Sample	Information	Lab Matrix	Result	Unit	Qual.	Analysis Date	Dilution
IW052716AL1 lcs	Lab Control Standard	Liquid	100	%Rec		5/27/16	1
IW052716AL2 lc2	Lab Control Standard Dup.	Liquid	100	%Rec		5/27/16	1

US EPA Region 10 Laboratory

Multi-Analyte Final Report



Project Code : SFP-104A

Site : MAY CREEK LANDFILL RA

Contact : Jeff Fowlow

Account : 2016T10P303DD210ZZLA00

Sample : 16084624

Information : TB03DR

Matrix : Liquid

Weight Basis : N/A

Collected : 2/25/2016 4:12:00PM

Parameter : ICP-SAS

Fraction : Total

Prep Method: 3010A - Acid Digestion, aqueous samples, SW-846

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7429905	Aluminum	90.3	mg/L	JL	6/21/16	10
7440360	Antimony	0.42	mg/L	JL	6/21/16	10
7440382	Arsenic	1.1	mg/L	JL	6/21/16	10
7440393	Barium	1.75	mg/L	JL	6/21/16	10
7440417	Beryllium	0.017	mg/L	UJL	6/21/16	10
7440439	Cadmium	0.937	mg/L	JL	6/21/16	10
7440702	Calcium	102	mg/L	JL	6/21/16	10
7440473	Chromium	4.02	mg/L	JL	6/21/16	10
7440484	Cobalt	0.099	mg/L	JL	6/21/16	10
7440508	Copper	64.0	mg/L	JL	6/21/16	10
7439896	Iron	157	mg/L	JL	6/21/16	10
7439921	Lead	106	mg/L	JL	6/21/16	10
7439954	Magnesium	20.3	mg/L	JL	6/21/16	10
7439965	Manganese	3.19	mg/L	JL	6/21/16	10
7439987	Molybdenum	6.66	mg/L	JL	6/21/16	10
7440020	Nickel	0.551	mg/L	JL	6/21/16	10
7440097	Potassium	202	mg/L	JL	6/21/16	10
7782492	Selenium	0.87	mg/L	UJL	6/21/16	10
7440224	Silver	0.17	mg/L	UJL	6/21/16	10
7440235	Sodium	19300	mg/L	JL	6/21/16	100
7440280	Thallium	0.87	mg/L	UJL	6/21/16	10
7440622	Vanadium	0.26	mg/L	JL	6/21/16	10
7440666	Zinc	58.5	mg/L	JL	6/21/16	10

Sample : 16084624 Sample Duplicate

Information : TB03DR

Matrix : Liquid

Weight Basis : N/A

Collected : 2/25/2016 4:12:00PM

Parameter : ICP-SAS

Fraction : Total

Prep Method: 3010A - Acid Digestion, aqueous samples, SW-846

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7429905	Aluminum	88.9	mg/L	J	6/21/16	10
7440360	Antimony	0.47	mg/L		6/21/16	10
7440382	Arsenic	1.2	mg/L		6/21/16	10
7440393	Barium	1.60	mg/L		6/21/16	10
7440417	Beryllium	0.017	mg/L	U	6/21/16	10
7440439	Cadmium	0.927	mg/L		6/21/16	10
7440702	Calcium	91.3	mg/L	J	6/21/16	10
7440473	Chromium	3.86	mg/L		6/21/16	10
7440484	Cobalt	0.10	mg/L		6/21/16	10
7440508	Copper	64.0	mg/L		6/21/16	10
7439896	Iron	144	mg/L		6/21/16	10
7439921	Lead	101	mg/L		6/21/16	10
7439954	Magnesium	18.9	mg/L		6/21/16	10
7439965	Manganese	3.00	mg/L		6/21/16	10
7439987	Molybdenum	6.87	mg/L		6/21/16	10
7440020	Nickel	0.503	mg/L		6/21/16	10
7440097	Potassium	205	mg/L		6/21/16	10
7782492	Selenium	0.87	mg/L	U	6/21/16	10
7440224	Silver	0.17	mg/L	U	6/21/16	10
7440235	Sodium	19500	mg/L		6/21/16	100
7440280	Thallium	0.87	mg/L	UJ	6/21/16	10
7440622	Vanadium	0.26	mg/L	J	6/21/16	10
7440666	Zinc	55.3	mg/L		6/21/16	10

Sample : 16084624 Matrix Spike

Information : TB03DR

Matrix : Liquid

Collected : 2/25/2016 4:12:00PM

Weight Basis : N/A

Parameter : ICP-SAS

Fraction : Total

Prep Method: 3010A - Acid Digestion, aqueous samples, SW-846

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7429905	Aluminum			NA	6/21/16	10
7440360	Antimony	81	%Rec		6/21/16	10
7440382	Arsenic	110	%Rec		6/21/16	10
7440393	Barium	98	%Rec		6/21/16	10
7440417	Beryllium	102	%Rec		6/21/16	10
7440439	Cadmium			NA	6/21/16	10
7440702	Calcium			NA	6/21/16	10
7440473	Chromium	80	%Rec		6/21/16	10
7440484	Cobalt	93	%Rec		6/21/16	10
7440508	Copper	111	%Rec		6/21/16	10
7439896	Iron			NA	6/21/16	10
7439921	Lead			NA	6/21/16	10
7439954	Magnesium	100	%Rec		6/21/16	10
7439965	Manganese	109	%Rec		6/21/16	10
7439987	Molybdenum	102	%Rec		6/21/16	10
7440020	Nickel	78	%Rec		6/21/16	10
7440097	Potassium	125	%Rec		6/21/16	10
7782492	Selenium	104	%Rec		6/21/16	10
7440224	Silver	114	%Rec		6/21/16	10
7440235	Sodium			NA	6/21/16	100
7440280	Thallium	72	%Rec		6/21/16	10
7440622	Vanadium	97	%Rec		6/21/16	10
7440666	Zinc			NA	6/21/16	10

Sample : IW061016ABL Blank

Information : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : ICP-SAS

Fraction : Total

Prep Method: 3010A - Acid Digestion, aqueous samples, SW-846

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7429905	Aluminum	0.10	mg/L	U	6/21/16	1
7440360	Antimony	0.020	mg/L	U	6/21/16	1
7440382	Arsenic	0.040	mg/L	U	6/21/16	1
7440393	Barium	0.0010	mg/L	U	6/21/16	1
7440417	Beryllium	0.0010	mg/L	U	6/21/16	1
7440439	Cadmium	0.0020	mg/L	U	6/21/16	1
7440702	Calcium	0.18	mg/L		6/21/16	1
7440473	Chromium	0.0050	mg/L	U	6/21/16	1
7440484	Cobalt	0.0050	mg/L	U	6/21/16	1
7440508	Copper	0.0050	mg/L	U	6/21/16	1
7439896	Iron	0.020	mg/L	U	6/21/16	1
7439921	Lead	0.025	mg/L	U	6/21/16	1
7439954	Magnesium	0.050	mg/L	U	6/21/16	1
7439965	Manganese	0.0020	mg/L	U	6/21/16	1
7439987	Molybdenum	0.0060	mg/L	U	6/21/16	1
7440020	Nickel	0.0050	mg/L	U	6/21/16	1
7440097	Potassium	0.70	mg/L	U	6/21/16	1
7782492	Selenium	0.050	mg/L	U	6/21/16	1
7440224	Silver	0.010	mg/L	U	6/21/16	1
7440235	Sodium	0.10	mg/L	U	6/21/16	1
7440280	Thallium	0.050	mg/L	U	6/21/16	1
7440622	Vanadium	0.0050	mg/L	U	6/21/16	1
7440666	Zinc	0.0326	mg/L		6/21/16	1

Sample : IW061016AL1 Lab Control Std**Information :** Lab Control Standard**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 3010A - Acid Digestion, aqueous samples, SW-846**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7429905	Aluminum	96	%Rec		6/21/16	1
7440360	Antimony	100	%Rec		6/21/16	1
7440382	Arsenic	99	%Rec		6/21/16	1
7440393	Barium	97	%Rec		6/21/16	1
7440417	Beryllium	95	%Rec		6/21/16	1
7440439	Cadmium	98	%Rec		6/21/16	1
7440702	Calcium	94	%Rec		6/21/16	1
7440473	Chromium	95	%Rec		6/21/16	1
7440484	Cobalt	95	%Rec		6/21/16	1
7440508	Copper	97	%Rec		6/21/16	1
7439896	Iron	99	%Rec		6/21/16	1
7439921	Lead	94	%Rec		6/21/16	1
7439954	Magnesium	101	%Rec		6/21/16	1
7439965	Manganese	99	%Rec		6/21/16	1
7439987	Molybdenum	100	%Rec		6/21/16	1
7440020	Nickel	99	%Rec		6/21/16	1
7440097	Potassium	100	%Rec		6/21/16	1
7782492	Selenium	97	%Rec		6/21/16	1
7440224	Silver	102	%Rec		6/21/16	1
7440235	Sodium	99	%Rec		6/21/16	1
7440280	Thallium	77	%Rec		6/21/16	1
7440622	Vanadium	95	%Rec		6/21/16	1
7440666	Zinc	103	%Rec		6/21/16	1

Sample : IW061016AL2 Lab Control Std#2**Information :** Lab Control Standard Dup.**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 3010A - Acid Digestion, aqueous samples, SW-846**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7429905	Aluminum	95	%Rec		6/21/16	1
7440360	Antimony	100	%Rec		6/21/16	1
7440382	Arsenic	98	%Rec		6/21/16	1
7440393	Barium	97	%Rec		6/21/16	1
7440417	Beryllium	95	%Rec		6/21/16	1
7440439	Cadmium	98	%Rec		6/21/16	1
7440702	Calcium	93	%Rec		6/21/16	1
7440473	Chromium	95	%Rec		6/21/16	1
7440484	Cobalt	95	%Rec		6/21/16	1
7440508	Copper	96	%Rec		6/21/16	1
7439896	Iron	98	%Rec		6/21/16	1
7439921	Lead	93	%Rec		6/21/16	1
7439954	Magnesium	100	%Rec		6/21/16	1
7439965	Manganese	99	%Rec		6/21/16	1
7439987	Molybdenum	100	%Rec		6/21/16	1
7440020	Nickel	99	%Rec		6/21/16	1
7440097	Potassium	99	%Rec		6/21/16	1
7782492	Selenium	97	%Rec		6/21/16	1
7440224	Silver	102	%Rec		6/21/16	1
7440235	Sodium	100	%Rec		6/21/16	1
7440280	Thallium	80	%Rec		6/21/16	1
7440622	Vanadium	95	%Rec		6/21/16	1
7440666	Zinc	105	%Rec		6/21/16	1



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MEMORANDUM

DATE: April 4, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: Organic Data Summary Check, May Creek Landfill Site, Renton, Washington

REF: TDD: 16-02-0007 PAN: 1004530.0004.145.01

The data summary check of 14 soil samples collected from the May Creek Landfill site located in Renton, Washington has been completed. Analyses for extended gasoline range total petroleum hydrocarbons were performed following NWTPH-Gx at the Manchester Environmental Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VE/M).

The samples were numbered:

16084601	16084602	16084603	16084604	16084605	16084606
16084610	16084611	16084612	16084613	16084614	16084615
16084616	16084617				

No discrepancies were noted. The secondary reviewer added the bias qualifiers H (high bias), K (unknown bias), and/or L (low bias) to applicable estimated results.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

Subject: Data Release for Total Petroleum Hydrocarbon-Gasoline Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: May Creek Landfill RA

Project Code: SFP-104A

From: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

To: Jeff Fowlow
Office of Environmental Cleanup, USEPA Region 10

CC: Renee Nordeen
E&E

I have authorized release of this data package. Attached you will find the total petroleum hydrocarbon-gasoline range extended (TPH-Gx) analysis results for the May Creek Landfill RA samples collected 2/25/16. For further information regarding the attached data, contact Chris Pace at 360-871-8703.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM
FOR ORGANIC CHEMICAL ANALYSES

Date: March 22, 2016

To: Jeff Fowlow
Office of Environmental Cleanup, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the Total Petroleum Hydrocarbon-Gasoline Range Extended Analysis of Samples from the May Creek Landfill RA

Project Code: SFP-104A
Account Code: 2016T10P303DD210ZZLA00

CC: Renee Nordeen
E&E

The following is a quality assurance review of the data for gasoline range organics (TPH-Gx) of samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory using Washington State Department of Ecology Method NWTPH-Gx.

This review was conducted for the following samples:

16084601	16084602	16084603	16084604	16084605	16084606
16084610	16084611	16084612	16084613	16084614	16084615
16084616	16084617				

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

For those tests for which the EPA Region 10 Laboratory has been accredited by The NELAC Institute (TNI), all requirements of the current TNI Standard have been met.

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied to soil/sediment and preserved water samples is 14 days from the time of collection. All samples were analyzed within the applicable criteria.

4. Sample Preparation

Samples were prepared according to the method/SOP.

5. Initial Calibration

Initial calibrations were performed on 2/22/16 for gasoline range organics and the surrogate, 1,4-difluorobenzene. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq 20\%$ or the correlation coefficients met the criteria of ≥ 0.99 .

6. Continuing Calibration Verification (CCV)

The CCV met the criteria for frequency of analysis. The percent accuracies were 80-120% of the true value for gasoline range organics.

7. Blank Analysis

Method blanks were prepared and analyzed with each sample extraction batch to evaluate the potential for laboratory contamination and effects on the sample results. Gasoline range organics were not detected in the blank(s).

8. Surrogates

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. All surrogate recoveries for the samples were within the Laboratory's SOP criteria of 50-150%.

9. LCS/LCSD

Data for laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the Laboratory's SOP criteria of 58-141% with a relative percent difference (RPD) of ≤ 30 .

10. Duplicate Sample Analysis

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. Duplicate analysis was performed using samples 16084601. All results which were above 5 times the reporting limit met the Laboratory's SOP relative percent difference (RPD) criteria of ≤ 30 .

11. Compound Quantitation

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

12. Identification

Gasoline range organics is a collective term for volatile petroleum products, e.g. gasolines, naphtha, mineral spirits, stoddard solvent, and other volatile petroleum products.

Sample 16084601 and 16084601 duplicate contained detectable gasoline along with extraneous terpenes and hydrocarbons. The gasoline range organics results were qualified as estimated, "J", due to the non-gasoline components present.

Sample 16084602 contained detectable gasoline.

Samples 16084603, 16084614 and 16084615 contained terpenes and hydrocarbons in the gasoline range but no major components of gasoline. Where non-gasoline components were significant the reporting limit was raised to the equivalent concentration of gasoline and qualified as estimated, "UJ".

None of the other samples had gasoline range organics detected above the reporting limit.

13. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871-8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. <u>No value is reported with this qualification.</u>
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. <u>No value is reported with this qualification.</u>

US EPA Region 10 Laboratory

Multi-Analyte Final Report



Project Code : SFP-104A

Site : MAY CREEK LANDFILL RA

Contact : Jeff Fowlow

Account : 2016T10P303DD210ZZLA00

Sample : 16084601

Information : TA01SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 12:59:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	26	mg/Kg	J H	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	70	%Rec		3/ 1/16	1

Sample : 16084602

Information : TA02SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 2:13:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	15	mg/Kg		3/ 2/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	71	%Rec		3/ 2/16	1

Sample : 16084603

Information : TA03SS

Matrix : Soil

Collected : 2/25/2016 2:57:00PM

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	48	mg/Kg	UJH	3/ 2/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	66	%Rec		3/ 2/16	1

Sample : 16084604

Information : TA04SS

Matrix : Soil

Collected : 2/25/2016 3:34:00PM

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.6	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	74	%Rec		3/ 1/16	1

Sample : 16084605

Information : TA05SS

Matrix : Soil

Collected : 2/25/2016 4:09:00PM

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	7.6	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	68	%Rec		3/ 1/16	1

Sample : 16084606

Information : TR01WT

Matrix : Water

Collected : 2/26/2016 11:32:00AM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	50	ug/L	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	72	%Rec		3/ 1/16	1

Sample : 16084610

Information : TD05SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 4:47:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	8.5	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	69	%Rec		3/ 1/16	1

Sample : 16084611

Information : TB01SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 2:15:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.3	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	65	%Rec		3/ 1/16	1

Sample : 16084612

Information : TD01SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 2:57:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	52	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	66	%Rec		3/ 1/16	1

Sample : 16084613

Information : TD02SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 3:24:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	6.3	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	68	%Rec		3/ 1/16	1

Sample : 16084614

Information : TD03SS

Matrix : Soil

Weight Basis : Dry

Collected : 2/25/2016 3:42:00PM

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	20	mg/Kg	UJH	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	76	%Rec		3/ 1/16	1

Sample : 16084615

Information : TD04SS

Matrix : Soil

Collected : 2/25/2016 4:03:00PM

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	72	mg/Kg	UJH	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	66	%Rec		3/ 1/16	1

Sample : 16084616

Information : TB02SS

Matrix : Soil

Collected : 2/25/2016 3:55:00PM

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	4.3	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	66	%Rec		3/ 1/16	1

Sample : 16084617

Information : TB03SS

Matrix : Soil

Collected : 2/25/2016 4:50:00PM

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.2	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	68	%Rec		3/ 1/16	1

Sample : 16084601 Sample Duplicate**Information :** TA01SS**Matrix :** Soil**Weight Basis :** Dry**Collected :** 2/25/2016 12:59:00PM**Parameter :** TPH-Gx**Prep Method:** NWTPH-Gx - Gasoline range organics**Analysis Method:** NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	29	mg/Kg	J	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	67	%Rec		3/ 1/16	1

Sample : 91V022916BL1 Blank**Information :** Blank**Matrix :** Solid**Weight Basis :** Dry**Parameter :** TPH-Gx**Prep Method:** NWTPH-Gx - Gasoline range organics**Analysis Method:** NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
*90209	TPH-Gx Gasoline Range Organics	5.0	mg/Kg	U	3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	65	%Rec		3/ 1/16	1

Sample : 91V022916LCS1 Lab Control Std**Information :** Lab Control Standard**Matrix :** Solid**Weight Basis :** Dry**Parameter :** TPH-Gx**Prep Method:** NWTPH-Gx - Gasoline range organics**Analysis Method:** NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	85	%Rec		3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	71	%Rec		3/ 1/16	1

Sample : 91V022916LCS2 Lab Control Std#2

Information : Lab Control Standard Dup.

Matrix : Solid

Weight Basis : Dry

Parameter : TPH-Gx

Prep Method: NWTPH-Gx - Gasoline range organics

Analysis Method: NWTPH-Gx - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	85	%Rec		3/ 1/16	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	69	%Rec		3/ 1/16	1



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Global Environmental Specialists

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MEMORANDUM

DATE: April 6, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Organic Data Summary Check, May Creek Landfill Site, Renton, Washington**

REF: TDD: 16-02-0067 PAN: 1004530.0004.145.01

The data summary check of 6 product/waste samples collected from the May Creek Landfill site located in Renton, Washington has been completed. Hydrocarbon identification (HCID) analysis were performed at the US EPA Region 10 Laboratory in Port Orchard, Washington using Washington State Department of Ecology Method NWTPH-HCID. All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VE/M).

The samples were numbered:

16084619 16084621 16084622 16084623 16084625 16084626

No discrepancies were noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

Subject: Data Release for Total Petroleum Hydrocarbon Identification Analysis from the USEPA Region 10 Laboratory

Project Name: May Creek Landfill RA

Project Code: SFP-104A

From: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

To: Jeff Fowlow
Office of Environmental Cleanup, USEPA Region 10

CC: Renee Nordeen
E&E

I have authorized release of this data package. Attached you will find the Hydrocarbon Identification (HCID) analysis results for the May Creek Landfill RA samples collected 2/25/16. For further information regarding the attached data, contact Chris Pace at 360-871-8703.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM
FOR ORGANIC CHEMICAL ANALYSES

Date: April 4, 2016

To: Jeff Fowlow
Office of Environmental Cleanup, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the hydrocarbon Identification Analysis of Samples from the May Creek Landfill RA

Project Code: SFP-104A
Account Code: 2016T10P303DD210ZZLA00

CC: Renee Nordeen
E&E

The following is a quality assurance review of the data for hydrocarbon identification (HCID) analysis of a product/waste samples from the above referenced site. The analyses were performed at the US EPA Region 10 Laboratory using Washington State Department of Ecology Method NWTPH-HCID.

This review was conducted for the following samples:

16084619 16084621 16084622 16084623 16084625 16084626

Identification

Petroleum products are identified by pattern matching with reference product chromatograms. Motor oils, hydraulic fluids and similar petroleum products which present an unresolved chromatographic envelope of compounds may be reported using the collective term, lube oil, unless specific identification is possible. Heavy fuel oils, e.g. fuel oil #6 or Bunker C, which contain a diesel range component as well as a lube oil (and higher) range may be reported using the collective term, heavy fuel oil, unless specific identification is possible. These products should not, however, be confused with mixtures of #2 diesel and motor oils.

Sample Preparation

Product/waste samples 16084621, 16084622, 16084625 and 16084626 consisted of a single organic phase and were prepared by diluting approximately 0.1g in methylene chloride to a final volume of 10mL prior to analysis.

Product/waste samples 16084619 and 16084623 consisted of a two phases, an organic phase above an aqueous phase. The organic phases (16084619a and 16084623a) were prepared by diluting approximately 0.1g in methylene chloride to a final volume of 10mL prior to analysis. The aqueous phases (16084619b and 16084623b) were extracted by adding approximately 1mL to 9mL of methylene chloride and vortexing. A portion of the methylene chloride extract was then analyzed.

Results

The gas chromatographic/ mass spectrometry (GC/FID) chromatogram of sample 16084619a (organic phase) was consistent with motor oil. The GC/FID chromatogram of sample 16084619b (aqueous phase) indicated the presence of motor oil and non-petroleum product organic compounds. The non-petroleum product organic compounds were further evaluated by gas chromatography/mass spectrometry (GC/MS). Butanoic acid, methylbutanoic acid, methylpentanoic acid, 2-piperidinone and benzeneacetic acid were tentatively identified by GC/MS.

The GC/FID chromatogram of sample 16084621 did not contain any recognizable petroleum product pattern but did indicate the presence of non-petroleum product organic compounds and appeared to be an organic solvent. The non-petroleum product organic compounds were further evaluated by GC/MS. Acetone, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, toluene, butylacetate, ethylbenzene and xylenes were tentatively identified by GC/MS.

The GC/FID chromatogram of sample 16084622 did not contain any recognizable petroleum hydrocarbon pattern but did indicate the presence of non-petroleum product organic compounds and appeared to be an organic solvent. The non-petroleum product organic compounds were further evaluated by GC/MS. Acetone, alkyl-cyclopentanes, methyl cyclohexane, 2-hexanone, toluene, butylacetate and butoxyethanol were tentatively identified by GC/MS.

The GC/FID chromatogram of sample 16084623a (organic phase) was consistent with a mixture of #2 diesel and motor oil. The GC/FID chromatogram of sample 16084623b (aqueous phase) indicated the presence of a mixture of # 2 diesel and motor oil.

The GC/FID chromatogram of sample 16084625 was consistent with lube oil.

The GC/FID chromatogram of sample 16084626 was consistent with a mixture of #2 diesel and motor oil.

Summary Table

Sample number	Product/waste appearance	HCID	GC/MS tentative identification of non-petroleum organic compounds
16084619a (organic phase)	viscous caramel colored oil	motor oil	
16084619b (aqueous phase)	brownish colored water	presence of motor oil	butanoic acid, methylbutanoic acid, methylpentanoic acid, 2-piperidinone and benzeneacetic acid
16084621	tan colored organic solvent	petroleum hydrocarbons not observed	acetone, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, toluene, butylacetate, ethylbenzene and xylenes
16084622	yellow colored organic solvent	petroleum hydrocarbons not observed	acetone, alkyl-cyclopentanes, methyl cyclohexane, 2-hexanone, toluene, butylacetate and butoxyethanol
16084623a (organic phase)	blackish colored oil	#2 diesel and motor oil	
16084623b (aqueous phase)	relatively clear water	presence of #2 diesel and motor oil	
16084625	reddish brown oil	lube oil	
16084626	black oil	#2 diesel and motor oil	

Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.



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MEMORANDUM

DATE: July 19, 2016

TO: Brad Martin, START-4 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Inorganic Data Summary Check, May Creek Landfill Site, Renton, Washington**

REF: TDD: 16-02-0007 PAN: 1004530.0004.145.01

The data summary check of 1 liquid sample collected from the May Creek Landfill site located in Renton, Washington has been completed. Toxicity characteristic leaching procedure (TCLP) cadmium, chromium, and lead analyses were performed following EPA and laboratory guidelines at the Manchester Environmental Laboratory, Port Orchard, Washington. All sample analyses were evaluated following EPA's Stage 4 Data Validation Manual Process (S4VM).

The sample was numbered: 16084624

The following statements include notes from the laboratory:

The required TCLP preliminary tests on sample 16084624 indicated that it was a mostly liquid sample containing approximately 0.77% solids (as defined by the TCLP procedure). Because the solid content was greater than 0.5%, the procedure requires that the solid portion be extracted separately; this extract is then combined with the liquid portion of the sample to create the final extracted sample for analysis.

The amount of sample available for the TCLP extraction was small, and the solids fraction was too small to perform the separate extraction step. Consequently, the sample was analyzed without the addition of the extract of the solids portion. The results are therefore qualified (J), estimated, and are biased low, as the extraction of the solid portion would have contributed additional analytes to the sample.

No discrepancies were noted. The secondary reviewer added the bias qualifier "L" to results indicated as likely low-biased according to the laboratory.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganics Results from the Region 10
USEPA Laboratory

PROJECT NAME: May Creek Landfill Removal Assessment

PROJECT CODE: SFP-104A

FROM: Gerald Dodo, Supervisory Chemist
USEPA Region 10 Laboratory
Office of Environmental Assessment

TO: Jeffrey Fowlow, On Scene Coordinator
Office of Environmental Cleanup
US EPA Region 10

CC: Renee Nordeen, E&E

I have authorized release of this data package. Attached you will find the TCLP Metals results for the May Creek Landfill Removal Assessment project for the samples received on 03/03/2016. For further information regarding the attached data, contact Katie Adams at 360-871-8748.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM
FOR INORGANIC CHEMICAL ANALYSES

DATE: July 18, 2016

TO: Jeff Fowlow, Project Manager
Office of Compliance and Enforcement, US EPA Region 10

From: Theresa McBride, Chemist
Office of Environmental Review and Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of TCLP Metals (Cd, Cr, Pb)
For May Creek Landfill

Project Code: SFP-104A
Account Code: 2016T10P303DD210ZZLA00

CC: Renee Nordeen, E&E

The following is a quality assurance review of the results of the analysis of 1 liquid sample for the TCLP Metals cadmium, chromium, and lead. (These metals were evaluated because the total metals analysis of the sample indicated that these might be present in sufficient quantity to exceed the critical TCLP levels) This sample was submitted for the May Creek Landfill Project. The analyses were performed by EPA chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following sample: 16084624

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). Method excursions were required due to the limited sample volume available. The excursions are discussed in the Sample Preparation and Matrix Spike/Matrix Spike Duplicate Analysis sections, below.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "Laboratory/QAPP Criteria Not Met". Additional information which may affect data usage is discussed in a "NOTE:" which concludes the affected section.

For those tests for which the USEPA Region 10 Laboratory has been accredited by The NELAC Institute (TNI), all requirements of the current TNI Standard have been met.

1. Sample Transport and Receipt

Upon sample receipt, all conditions met Laboratory/QAPP requirements for this project. These samples were stored in locked storage or in direct possession of the responsible analyst for the entire time they were held at the Region 10 Laboratory.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples. The samples covered by this review

met method holding time recommendations.

3. Sample Preparation -Laboratory/QAPP Criteria Not Met

The required TCLP preliminary tests on sample 16084624 indicated that it was a mostly liquid sample containing approximately 0.77% solids (as defined by the TCLP procedure). Because the solid content was greater than 0.5%, the procedure requires that the solid portion be extracted separately; this extract is then combined with the liquid portion of the sample to create the final extracted sample for analysis.

The amount of sample available for the TCLP extraction was small, and the solids fraction was too small to perform the separate extraction step.

Consequently, the sample was analyzed without the addition of the extract of the solids portion. The results are therefore qualified (J), estimated, and are biased low, as the extraction of the solid portion would have contributed additional analytes to the sample.

Note that the digestion of the extracted sample was performed with reduced volume, due to the limited sample size. This should not have a negative impact on the data quality.

4. Initial Calibration and Calibration Verification

The standardization generated for the initial calibration met method criteria. The Minimum Reporting Level (MRL) of the method is verified on each day of analysis by including it as the low point on the calibration curve, and/or by measuring it as a QC standard. All calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification. No qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples

Laboratory control sample for metals met the 85-115% recovery acceptance criteria for the method. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis

The metals method blanks did not contain detectable levels of analyte which would require data qualification.

7. Internal Standards

All metals internal standards met instrument response criteria.

8. Duplicate Analysis

Duplicate analysis was performed on sample 16084624. Sample duplicate results met all method requirements. No qualification was required based on duplicate analysis.

9. Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike analysis for metals was performed on sample 16084624. A matrix spike duplicate was not performed due to the limited sample volume available. No qualification was required based on matrix spike analyses.

10. Interferences

Serial dilution and inter-element correction checks were analyzed to demonstrate that interferences were under control. All results of these checks met laboratory acceptance criteria.

11. Reporting Limits

All sample results that fall below the MRL are assigned the value of the MRL and the 'U' qualifier is attached. MRL values for some analytes have been elevated to reflect dilutions which were performed to mitigate interferences, or to bring analyte concentrations within the method calibration range.

For metals analysis, sample results above the MRL but below the LRS are reported to two significant figures; results above the LRS level are reported to three significant figures.

12. Data Qualifiers

The (U) qualifier was attached to all sample results that fall below the MRL.

The (J) qualifier was attached to all sample results because during sample preparation, there was not enough solid material to extract and combine with the liquid portion of the sample, as indicated by the TCLP extraction method. The sample results are predicted to be biased low because of this deviation.

Below are the definitions for the codes used qualifying data from these analyses. When more than one quality issue was involved, the most restrictive qualifier has been attached to the data.

- U - The analyte was not detected at or above the reported value.
- J - The identification of the analyte is acceptable; however the reported value is an estimate.
- UJ - The analyte was not detected at or above the reported value. The reported value is an estimate.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Katie Adams at the Region 10 Laboratory, phone number (360) 871-8748.

13. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis - when a duplicate of a sample (DU), a matrix spike (MSD), or a laboratory control sample (LCS) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards - Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Low Range Standard (LRS) - A level (often 5 times the MRL) where it has been demonstrated that the instrument achieves defined levels of accuracy and precision (more stringent than at the MRL), as checked with the Low Range Standard during analysis.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analytes and the percent recoveries of

the analytes are determined.

Method Blank – An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) – the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.



US EPA Region 10 Laboratory

Multi-Analyte Final Report



Project Code : SFP-104A

Site : MAY CREEK LANDFILL RA

Contact : Jeff Fowlow

Account : 2016T10P303DD210ZZLA00

Sample : 16084624

Information : TB03DR

Matrix : Liquid

Weight Basis : N/A

Collected : 2/25/2016 4:12:00PM

Parameter : ICP-SAS

Lab Matrix : TCLP Extract

Fraction : Total

Prep Method: 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7440439	Cadmium	0.13	mg/L	UJ	7/11/16	10
7440473	Chromium	0.42	mg/L	J	7/11/16	10
7439921	Lead	7.2	mg/L	J	7/11/16	10

Sample : 16084624 Sample Duplicate

Information : TB03DR

Matrix : Liquid

Weight Basis : N/A

Collected : 2/25/2016 4:12:00PM

Parameter : ICP-SAS

Lab Matrix : TCLP Extract

Fraction : Total

Prep Method: 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7440439	Cadmium	0.099	mg/L	UJ	7/11/16	10
7440473	Chromium	0.45	mg/L	J	7/11/16	10
7439921	Lead	7.07	mg/L	J	7/11/16	10

Sample : 16084624 Matrix Spike

Information : TB03DR

Matrix : Liquid

Collected : 2/25/2016 4:12:00PM

Weight Basis : N/A

Parameter : ICP-SAS

Lab Matrix : TCLP Extract

Fraction : Total

Prep Method: 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7440439	Cadmium	102	%Rec		7/11/16	10
7440473	Chromium	100	%Rec		7/11/16	10
7439921	Lead	90	%Rec		7/11/16	10

Sample : IT062816ABL Blank

Information : Blank

Matrix : TCLP Extract

Weight Basis : N/A

Parameter : ICP-SAS

Fraction : Total

Prep Method: 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7440439	Cadmium	0.0020	mg/L	U	7/11/16	1
7440473	Chromium	0.0050	mg/L	U	7/11/16	1
7439921	Lead	0.025	mg/L	U	7/11/16	1

Sample : IW070616ABL Blank

Information : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : ICP-SAS

Fraction : Total

Prep Method: 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate

Analysis Method: 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7440439	Cadmium	0.0020	mg/L	U	7/11/16	1
7440473	Chromium	0.0050	mg/L	U	7/11/16	1
7439921	Lead	0.025	mg/L	U	7/11/16	1

Sample : IW070616BBL Blank**Information :** Blank**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7440439	Cadmium	0.0020	mg/L	U	7/11/16	1
7440473	Chromium	0.0050	mg/L	U	7/11/16	1
7439921	Lead	0.025	mg/L	U	7/11/16	1

Sample : IW070616CBL Blank**Information :** Blank**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
7440439	Cadmium	0.0020	mg/L	U	7/11/16	1
7440473	Chromium	0.0050	mg/L	U	7/11/16	1
7439921	Lead	0.025	mg/L	U	7/11/16	1

Sample : IW070616AL1 Lab Control Std**Information :** Lab Control Standard**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7440439	Cadmium	101	%Rec		7/11/16	1
7440473	Chromium	105	%Rec		7/11/16	1
7439921	Lead	99	%Rec		7/11/16	1

Sample : IW070616AL2 Lab Control Std#2**Information :** Lab Control Standard Dup.**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7440439	Cadmium	102	%Rec		7/11/16	1
7440473	Chromium	105	%Rec		7/11/16	1
7439921	Lead	100	%Rec		7/11/16	1

Sample : IW070616AL3 Lab Control Std#3**Information :** Lab Control Standard Trip.**Matrix :** Liquid**Weight Basis :** N/A**Parameter :** ICP-SAS**Fraction :** Total**Prep Method:** 1311/3010A - TCLP Extraction for Metals followed by Acid Digestion of Leachate**Analysis Method:** 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
7440439	Cadmium	101	%Rec		7/11/16	1
7440473	Chromium	103	%Rec		7/11/16	1
7439921	Lead	98	%Rec		7/11/16	1



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY**

7411 Beach Dr. East
Port Orchard, Washington 98366

CORRECTIVE ACTION NOTICE

Project Name:	May Creek Landfill RA	Date Received:	2/26/2016
Project Code:	SFP-104A	Sampling Agency	E&E
Account Code:	2016T10P303DD210ZZLA00	Sampler(s):	Brian Martin
Project Officer:	Jeff Fowlow		
Phone:	206-553-2751	Recorder:	Brian Martin

Sample Numbers: 16084601-6, 10-17

4	Number of shipping containers received
0	Number of shipping containers received with errors
8	Number of chains of custody received
6	Number of chains of custody received with errors

# Containers	Description of Shipment/Chain of Custody Container Issues Noted:
0	Shipping Container - Addressed incorrectly (must be addressed to 'Sample Custodian')
0	Shipping Container - Samples improperly packed for shipment
0	Shipping Container - Cooler Return information not provided
0	Custody Seals - Custody Samples received with seals missing/broken
0	Chain of Custody - Missing/Outdated Form
6	Chain of Custody - Missing/Incorrect chain of custody header information

14	Number of samples received in this shipment
14	Number of samples received with critical and/or non-critical errors
14	Number of samples received with critical errors

# Samples	Description of Shipment/Chain of Custody/Sample Container Issues Noted:
0	Chain of Custody - Missing/Incorrect EPA numbers
0	Chain of Custody - No analysis/Incorrect analysis listed for received samples
0	Chain of Custody - Samples listed not included in shipment
0	Unique Container ID* - Missing on COC and/or Not written on the container
0	Unique Container ID* - Incorrectly assigned
0	Sample Container - Labels Missing/Damaged/Illegible
0	Sample Container - EPA Sample Numbers Missing/Incorrect
0	Custody Seals - Criminal Samples received with seals missing/broken
14	Sample Container - Received at elevated temperature (above 6°C) **See Below***
0	Sample Container - Sample preservation requirements not met
0	Sample Container - Broken/Leaking
0	Sample Container - Insufficient sample volume and/or incorrect sample container
0	
0	

* per Region 10 Sample Receiving SOP

Additional Information

*****The incorrect project code was recorded on the chains of custody.**

*****The cooler with the TPH-Gx sample jars arrived above temperature from 7C to 11C, the TPH-Gx water sample 10C. The encore portion of the TPH-Gx samples were frozen within 48 hours of collection as required.**

Transmitted By: Karen Norton/ESAT

Date: 2/29/2016

Original: File

RSCC Contact: Jennifer Crawford

Project Officer: Jeff Fowlow

Laboratory Director: Barry Pepich

Laboratory Staff Gerald Dodo, David Dobb, Dana Walker, Chris Pace, Steve Reimer, Pat Coogan, Jennifer Marsalla, Kim Wood

cc: Renee Nordeen- E&E