



**Jefferson Avenue Site
Targeted Brownfields Assessment**

Tacoma, Washington

Technical Direction Document: 12-01-0013

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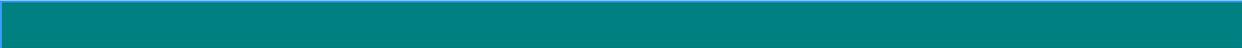


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List of Abbreviations and Acronyms

<u>Term</u>	<u>Definition</u>
mg/kg	Milligrams per Kilogram
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
AST	Aboveground Storage Tank
BaP	Benso(a)pyrene
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
bgs	Below Ground Surface
Clayton	Clayton Environmental Consultants
CLP	Contract Laboratory Program
cPAHs	Carcinogenic Polycyclic Aromatic Hydrocarbons
E & E	Ecology and Environment, Inc.
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
GPS	Global Positioning System
IDW	Investigation-Derived Waste
Langseth	Langseth Environmental Services, Inc.
MEL	Manchester Environmental Laboratory
MTCA	Model Toxics Control Act
Nowicki	Nowicki & Associates
PCB	Polychlorinated Biphenyl
PID/FID	Photoionization Detector/Flame-Ionization Detector
PM	Project Manager
ppm	Parts per Million
QA	Quality Assurance
QC	Quality Control
REC	Recognized Environmental Condition
RNI	Robinson Noble, Inc.
S.	South
SEC	Specialized Environmental Consulting, Inc.

List of Abbreviations and Acronyms (cont.)

<u>Term</u>	<u>Definition</u>
SEPA	State Environmental Policy Act
SIM	Selected Ion Monitoring
SQAP	Sampling and Quality Assurance Plan
START	Superfund Technical Assessment and Response Team
SVOCs	Semivolatile Organic Compounds
TAL	Target Analyte List
TBA	Targeted Brownfields Assessment
TDD	Technical Direction Document
TEC	Toxicity Equivalent Concentration
TEF	Toxicity Equivalency Factor
TM	Task Monitor
TPCHD	Tacoma-Pierce County Health Department
TPH	Total Petroleum Hydrocarbon
UST	Underground Storage Tank
VOC	Volatile Organic Compound

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Introduction

Pursuant to the United States Environmental Protection Agency (EPA) Region 10 Superfund Technical Assessment and Response Team (START) Contract EP-S7-06-02 and Technical Direction Document (TDD) Number 12-01-0013, Ecology and Environment, Inc. (E & E) performed a Targeted Brownfields Assessment (TBA) at the Jefferson Avenue Site in Tacoma, Washington. The EPA's Brownfields Economic Redevelopment Initiative is designed to empower states, cities, tribes, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely cleanup, and sustainably reuse brownfields sites (EPA 2002).

The purpose of this project is to investigate new and previously identified recognized environmental conditions (RECs) at the site in coordination with stakeholders. Stakeholders consist of the City of Tacoma (including their underground storage tank [UST] program), the Tacoma-Pierce County Health Department (TPCHD) Brownfields program, and the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program. The assessment included sampling of specific areas within the site related to RECs and determining whether cleanup at the site will be necessary. At each step of the TBA process, the EPA sought input and concurrence with stakeholders, including determining the final outcome of each REC.

The objective of this TBA report is to present the results of the limited site sampling for preliminary site characterization purposes. This report is organized as follows:

- **Section 1 (Introduction):** Authority for performance of this work and summary of report contents.
- **Section 2 (Site Description):** Description of site conditions, history, and site concerns.
- **Section 3 (Recognized Environmental Conditions):** Description of RECs investigated for this TBA.
- **Section 4 (Investigation and Results):** Summary of the field effort and chemicals detected at the site and a comparison of detected chemical concentrations to criteria values.

1. Introduction

- **Section 5 (Summary and Conclusions):** Summary of site conditions and conclusions drawn based on the information gathered during this investigation.
- **Section 6 (References):** List of references cited throughout the text.

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Site Description

The following sections describe the site location and background, general area conditions, site history, waste characteristics, future uses of the property, and the START site visit.

2.1 Site Location

Site Name:	Jefferson Avenue Site
Site Address:	Various
Latitude/Longitude:	47.241855° North, -122.440452° West
Reference Point for Coordinates:	Center of site
Horizontal Collection Method:	Unknown
Horizontal Reference Datum:	WGS84
Legal Description:	Township 20 North, Range 3 East, Section 9
Parcel Number:	Various
Size (in acres):	6.4
Site Owner:	City of Tacoma

2.2 Site Summary

The Jefferson Avenue Site consists of two city blocks bounded by South (S.) 21st and S. 23rd Streets, and by Tacoma Avenue S. and S. Jefferson Avenue in Tacoma, Washington (Figures 2-1 and 2-2). S. Fawcett Avenue runs north/south between the two city blocks. The 6.4-acre site is in a mixed commercial, light industrial, and residential setting, and is within 0.5 mile of the University of Washington – Tacoma Campus, the Tacoma Art Museum, the Museum of Glass, the Washington State History Museum, as well as other points of interest. The site consists of 34 individual parcels.

2.3 Site Ownership

The City of Tacoma had planned to use the site for construction of a new police headquarters. The 34-parcel site was assembled through a series of purchases from 17 different property owners from 1999 to 2000. Structures on the parcels were demolished in preparation for construction. Subsequently, plans changed and the police headquarters was built elsewhere. The site has remained vacant City-owned land. Previous ownership information is provided in Table 2-1. This table also includes all property addresses and parcel numbers.

2.4 Physical Setting

The Jefferson Avenue Site is located in the Puget Sound Lowlands Physiographic Region of Washington State. Upland terraces, rolling hills, and troughs create north-south ridges that characterize the general area. The Thea Foss Waterway is located approximately one mile to the east and opens to Commencement Bay to the north on the Puget Sound. (Clayton 1999)

Elevations at the site range from approximately 130 to 205 feet above mean sea level, increasing in height from east to west (GoogleEarth™ 2012). The primary soil type found at and in the vicinity of the site is Vashon Till, a mixture of clay, silt, sand, pebbles, and cobbles, a material encountered in much of the Tacoma City area. Perched water tables are common in the rainy season. This soil type is typically poorly sorted, nonstratified, and extremely compact. Medium to low drainage and permeability, and excellent foundation stability characterize the Vashon Till. (Clayton 1999)

The depth to ground water on the eastern portion of the site is between 3 and 5 feet below ground surface (bgs) based on drilling in this area (Nowicki 2005). Ground water in this area has been determined to flow to the east, with a slight northeasterly direction (Nowicki 2005). This flow direction is in agreement with what would be expected, given that land in this area slopes to the east toward the Thea Foss Waterway.

2.5 Historical Property Use

Historically, various portions of the Jefferson Avenue Site have been in use since 1896. The site was originally heavily developed with small residences, and gradually thinned over time. By 1999, only thirteen structures remained and were generally of 1920s construction. The parcels' uses in 1999 were light commercial and residential. The commercial uses included: gas stations and automobile repair businesses, used car sales, a truck rental business, a car washing business, a printing business, and a pest control company (Clayton 1999). Maps depicting former uses are presented as Figures 2-3 and 2-4. These features are discussed in greater detail in Section 2.2.5.1.

In 2002, the City of Tacoma issued a contract for the demolition of the buildings at seven addresses within the subject site. Six other structures were to be burned for fire training by the City of Tacoma's Fire Department; however, due to dry conditions, the fire department opted not to burn the buildings. For this reason, the demolition contract was expanded to include these six structures. All demolition work appears to have been completed in 2002. In addition, vegetation was cleared and the site was graded and hydroseeded. No buildings remain at the site; however, two retaining walls were left in-place. (City of Tacoma 2002)

2.6 Previous Investigations

The Jefferson Avenue Site has been the subject of several previous environmental assessments, most of which have focused on two former gas stations. A State Environmental Policy Act (SEPA) environmental impact statement (EIS) and a

Phase I environmental site assessment (ESA) were completed for the entire 6.4-acre property in 1999. All environmental investigations relating to the site are described below.

2.6.1 Entire 6.4-Acre Property

Two investigations of the entire 6.4 acre property have been completed. These investigations are described in the following sections.

2.6.1.1 SEPA Environmental Impact Statement – 1999

In March 1999, the City of Tacoma completed a SEPA EIS which assessed the potential environmental impacts from the construction and operation of a Central Police Services Facility at the Jefferson Avenue Site (City of Tacoma 1999). Several areas of known or suspected environmental contamination were identified (Figures 2-3 and 2-4). The following known onsite areas of environmental contamination were identified:

- Leaking USTs at 2122 S. Jefferson Avenue.
- Leaking USTs at 2112 S. Jefferson Avenue and polychlorinated biphenyls (PCBs) leaking from hydraulic oil in lifts at 2112 S. Jefferson Avenue.
- A pest control business that had been the subject of a criminal environmental enforcement action by Ecology (Note: no details regarding this action could be located during the EIS; however, a later report [i.e., Clayton 1999] states the business owner indicated this action was likely associated with an incident at a branch office where a non-target, federally protected bird was killed inadvertently by ingesting pest poison).
- Portions of the Commencement Bay Nearshore/Tideflats Superfund site extended to the eastern portion of the site. This Superfund site consisted of 67 acres of land owned by Asarco, Inc. and a 23-acre slag peninsula. (City of Tacoma 1999)

Several additional areas potentially associated with environmental contamination were identified. These areas included:

- An area of black grass on the lot north of the pest control business. This location formerly contained drums.
- A used car lot at 2132 S. Jefferson Avenue and a used car storage area at 2137 S. Jefferson Avenue that may have been impacted by petroleum products/wastes leaking from automobiles.
- An auto repair business at 2120 S. Jefferson Avenue that may contain USTs or PCB-containing hydraulic lifts.
- A service station at 2105/2109 Tacoma Avenue S. that may contain USTs.
- Buildings, both residential and commercial, that may contain asbestos-containing materials, lead-based paint, or PCB-containing fluorescent light ballasts.

- 55-gallon and 20-gallon drums of unknown contents on several properties at the site. (City of Tacoma 1999)

2.6.1.2 Phase I Environmental Site Assessment – 1999

In May 1999, Clayton Environmental Consultants (Clayton) completed a Phase I ESA at the site for the City of Tacoma. The purpose of the Phase I ESA was to determine the presence of RECs at the site in association with a real estate transaction. (Clayton 1999)

At the time of the Phase I ESA, 13 buildings were present at the site (Figure 2-4). Of these, six were single- or multi-family residences, six were commercial buildings (one vacant, former grocery store), and one was used for both residential and commercial purposes. All structures were provided with natural gas heating, with two structures also provided with electric heating. An out-of-service, 250-gallon, fuel oil, aboveground storage tank (AST) was observed at one residence (2116 S. Fawcett). All structures appeared to be connected to municipal sanitary sewer and water services; although, the ESA stated that structures built prior to the early 1900s may originally have had septic tanks. Storm water runoff from the site was observed to flow via storm drains to a storm drain system along S. 21st and 23rd Streets. (Clayton 1999)

At the time of the 1999 Phase I ESA, the commercial businesses included the following:

- 2117 S. Tacoma Avenue, a clothing store.
- 2139 S. Fawcett Avenue, a pest control business.
- 2112 S. Jefferson Avenue, a former automobile repair garage.
- 2120 S. Jefferson Avenue, an automobile sales business.
- 2122 S. Jefferson Avenue, a used automobile sales business. (Clayton 1999)

The Phase I ESA indicated that several floor drains were observed in a former repair garage at 2112 S. Jefferson Avenue and an oil/water separator was observed in a bermed area of the onsite parking lot at 2122 S. Jefferson Avenue. The oil/water separator was suspected of being in a former car wash area. A second car wash was present at 2125 S. Fawcett Avenue from 1967 to 1973. It was suspected that wash water likely discharged to the sanitary sewer, as a sanitary connection was mapped directly to the car wash area on the City of Tacoma's sewer map. The businesses at 2112 and 2120 S. Jefferson Avenue each contained a hydraulic hoist. The Phase I ESA also indicated that the “burned area” on the parcel north of the pest control business (described during the EIS) appeared “healthy.”

The Phase I ESA indicated that up to nine USTs may have once existed at the site on the properties at 2112 and 2122 S. Jefferson Avenue. These tanks are as follows:

- 2122 S. Jefferson Avenue:
 - 2,000-gallon leaded gasoline
 - 1,000-gallon waste oil
 - 1,000- to 4,000-gallon leaded gasoline
 - 1,000- to 4,000-gallon diesel
 - 10,000- to 19,000-gallon leaded gasoline
- 2112 S. Jefferson Avenue:
 - 2,000-gallon (removed, contents unknown)
 - 2,000-gallon (removed, contents unknown)
 - 2,000-gallon (removed, contents unknown)
 - 10,000-gallon (removed, contents unknown)

A soil stockpile associated with the removal of four USTs at 2112 S. Jefferson Avenue in 1995 (see Section 2.6.2.2 for a discussion of this action) was observed near the corner of S. 21st Street and S. Jefferson Avenue. This stockpile originally had been placed on 2122 S. Jefferson Avenue and, when present at this location, measured approximately 45 feet by 50 feet. Five samples were collected from this pile in May 1996, and no petroleum hydrocarbons were detected (the Phase I ESA does not state the specific analytical suite applied, and a map of sample locations was not included). Subsequent to this sampling event, the pile was moved north to the corner of S. 21st Street and S. Jefferson Avenue, the location observed during the Phase I ESA. (Clayton 1999)

The following RECs were identified during the 1999 Phase I ESA:

- Spills or releases of petroleum and other waste materials from USTs, solvents from automotive and printer operations, solvents from former car wash drains, and pesticides from the operating pest control business. Also, releases from drums stored on some properties.
- Two inactive USTs (one 1,000-gallon waste oil and one 2,000-gallon gasoline) at 2122 S. Jefferson Avenue, since they may have impacted the property prior to being taken out of service. The property operator had stated that these tanks and an associated oil/water separator were emptied of their contents in 1996, and the property owner stated the tanks had not been in service since 1985. Three other USTs were suspected of possibly being present at this address.
- The former gas station at 2112 S. Jefferson Avenue, which had been listed by Ecology and the TPCHD as requiring further cleanup or documentation of site conditions.

2. Site Description

- An open pit or well at 2112 S. Jefferson Avenue that had not been properly installed or registered and was a fall hazard and a potential receptor of hazardous dumping.
- The potential presence of undocumented USTs at 2112 and 2122 S. Jefferson Avenue. (Clayton 1999)

The Phase I ESA also included the following recommended actions:

- Soil and ground water sampling at the former gas station on S. Tacoma Avenue, at 2122 S. Jefferson Avenue, and downgradient of the pest control business.
- Excavation of soils, if impacted, near suspected areas of subsurface impact, possibly including petroleum, solvents, or pesticides.
- Removal of existing USTs.
- Soil and ground water sampling for leaking UST(s) at 2112 S. Jefferson Avenue to evaluate actual conditions and potential remediation requirements.
- Proper abandonment of the pit or well at 2112 S. Jefferson Avenue.
- A geophysical survey to identify potential USTs on properties fronting S. Jefferson Avenue.
- Conducting a comprehensive asbestos survey of buildings prior to repair, renovation, or demolition.
- Conducting a comprehensive lead-based paint survey of buildings prior to repair, renovation, or demolition. (Clayton 1999)

At the time of the Phase I ESA, businesses adjoining the Jefferson Avenue Site included:

- To the North: A glass store, vacant land, and tool company.
- To the South: A plaza, window cleaning business, vacant land, and warehouse.
- To the East: An equipment and supply business and tire business.
- To the West: A vacant commercial building, motor parts business, supply business (type not specified), and residence. (Clayton 1999)

These properties did not appear to present environmental concerns for the Jefferson Avenue Site based on visual observations and information obtained during the Phase I ESA. Additionally, it was determined that the Commencement Bay Nearshore/Tideflats Superfund site was not expected to have impacted the subject property. (Clayton 1999)

2.6.2 2112 and 2122 S. Jefferson Avenue

Multiple environmental assessments have been conducted on properties at 2112 and 2122 S. Jefferson Avenue. The property at 2112 S. Jefferson Avenue was residential until approximately 1945, when Harmon's Gasoline Station was constructed. The building continued to serve as a motor vehicle service operation until 2000. At some point, the property address was combined to include 2102 S. Jefferson Avenue (Ecology 2010). This property may also have once contained a gasoline service station, based on the 1928 and 1934 Polk City Directories (Clayton 1999) and a 1930 Sanborn map. This address was listed as "vacant" in the 1940 Polk City Directory (Clayton 1999).

The property at 2122 S. Jefferson Avenue was vacant land until the Ostby's Used Cars business went into operation in 1930. The structure that served Ostby's Used Cars was expanded as the business also expanded into vehicle rentals, vehicle repair, welding, and steel fabrication. This address later became Doych Motors. At some point, the property address was combined to include 2120 S. Jefferson Avenue, the former location of Downtown Auto Sales. (Ecology 2010)

The property at 2102 S. Jefferson Avenue was occupied only by a gasoline service station from 1934 to 1938 (Nowicki 2002b).

Leaking USTs and an automobile hydraulic hoist were the primary focus of the investigations conducted on these properties. These investigations are described below.

2.6.2.1 Underground Storage Tank Removal – 1995

In February 1995, Specialized Environmental Consulting, Inc. (SEC) removed USTs from the 2112 S. Jefferson Avenue property on behalf of the property owner (SEC 1995). At that time, the property was the location of a car detail shop and gas station. A permit was obtained for the removal of seven USTs; however, it appears that only four were removed. A report summarizing the removal action could not be located and, based on file correspondence, it appears such a report was not prepared. The four removed tanks were described in a UST onsite inspection form as "rust free." They were described as three 2,000-gallon tanks and one 10,000-gallon tank, though their contents were not indicated. The form indicated that a heavy gasoline odor was present and that soil from 2 inches bgs appeared to be contaminated with petroleum. Ground water infiltrated the excavation and filled to within 3 feet of the ground surface overnight. Additionally, one waste oil tank was described as being present at the property in the "south end bay entrance." This tank was noted to have tested positive for chlorinated solvents. It appears this tank was not included in the removal action. (TPCHD 1995)

SEC speculated that the contaminated soil observed around the tanks during their removal may have been from piping or valve failure, and possibly overflow events, since the tanks, themselves, were in good condition. Contaminated soil was described to have been present at "both pump islands, in the pipe runs, at the

valve manifold, and along the sewer line.” The contaminated soil also was described as extending 2 to 3 feet under the building and along the sewer line to the street. The contamination was contained in a sand layer approximately 1 foot to 18 inches in depth for approximately 50 feet. These features, however, were not depicted on a map. During the tank removal action, approximately 600 to 800 cubic yards of contaminated soil were excavated and placed in berms at the site. This soil included the observed contaminated soil around the sewer line to the street. Contaminated soil under the building was left in place, since it could not be removed without shoring the building. (SEC 1995)

2.6.2.2 UST and Hoist Removal Site Assessment and Soil Remediation Report – 2002

In October 2002, Nowicki & Associates (Nowicki) completed a UST and Hoist Removal Site Assessment and Soil Remediation investigation at 2112 and 2122 S. Jefferson Avenue on behalf of the City of Tacoma. At the time of this work, these two properties were both vacant. During this work, one 500-gallon and one 1,800-gallon gasoline UST were removed from 2122 S. Jefferson Avenue, and one abandoned hoist was removed from 2112 S. Jefferson Avenue (Figure 2-5). The gasoline USTs were used for onsite consumptive purposes by the former occupants of this address. A 1,000-gallon waste oil UST and a 2,000-gallon gasoline UST, documented as being present at 2122 S. Jefferson Avenue, were not removed as a part of this action. Petroleum contaminated soil was confirmed at the UST and the hoist excavations. The tanks were observed to be in good condition, with minimal surface erosion and no holes. Product releases were assumed to be due to leaks from piping. The two tanks were transported offsite for cleaning and recycling. (Nowicki 2002a)

Approximately 100 cubic yards of gasoline-impacted soil was removed from the UST excavation, and approximately 220 cubic yards of gasoline-, diesel-, and oil-range total petroleum hydrocarbon (TPH)-impacted soils were removed from the former hoist excavation. Confirmation soil samples were collected from the side walls, and the floors of the excavations and were analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX (benzene, toluene, ethylbenzene, and xylenes) compounds. All laboratory results were either non-detect or below Model Toxics Control Act (MTCA) Method A cleanup levels. Soils were temporarily stockpiled onsite, and were later transported to a treatment disposal facility. (Nowicki 2002a)

Ground water having an oily sheen infiltrated both excavations. Water samples were collected from both excavations and analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds. The UST excavation water sample contained gasoline-range TPHs at 2,800 micrograms per liter ($\mu\text{g/L}$) and benzene at 19 $\mu\text{g/L}$. These values were above Ecology MTCA Method A cleanup levels of 800 and 5 $\mu\text{g/L}$, respectively. The hoist excavation water sample contained diesel-range TPHs at 11,000 $\mu\text{g/L}$ and oil-range TPHs at 8,600 $\mu\text{g/L}$. These values were also above MTCA Method A cleanup levels of 800 $\mu\text{g/L}$ for gasoline and 500 $\mu\text{g/L}$ oil TPHs. (Nowicki 2002a)

Also during this investigation, four test pits (Test Pits #1 through #4) were excavated in areas south and north of the hoist excavation to depths of approximately 5 feet bgs in an attempt to determine the extent of impacted soil (Figure 2-5). One soil sample was collected from each excavation, and each was analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds. The soil sample collected from Test Pit #1, located northwest of the hoist excavation, contained gasoline-range TPHs at 150 milligrams per kilogram (mg/kg), above the MTCA Method A cleanup level of 100 mg/kg. Diesel- and oil-range TPHs were below cleanup levels. Samples collected from test pits excavated to the northeast and south (i.e., Test Pits #2, #3, and #4) did not contain gasoline-, diesel-, or oil-range TPHs or BTEX compounds above MTCA Method A cleanup levels. (Nowicki 2002a)

A sample of ground water that infiltrated the Test Pit #1 excavation overnight was collected and analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds. The sample contained diesel- and oil-range TPHs at 11,000 µg/L and 8,600 µg/L, respectively, and were above cleanup levels. Gasoline-range TPHs were present at 140 µg/L, and were below the cleanup level. Soil removal was conducted at Test Pit #1. An abandoned section of 2-inch-diameter product piping was encountered on the west excavation sidewall at approximately 2.5 feet bgs. Vapor readings from inside the piping suggested it as a part of the gasoline source for contaminated soil in the general vicinity of the hoist and Test Pit #1. Approximately 107 cubic yards of soil were excavated at Test Pit #1, with the original hoist excavation having been expanded to the south and north. A total of 220 cubic yards of soil were removed from the hoist/Test Pit #1 area. Confirmation soil samples were once again collected. Samples were analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds. All results were below cleanup levels. The hoist/Test Pit #1 and UST excavations were backfilled with clean imported materials. (Nowicki 2002a)

Based on site work, the following conclusions and recommendations were made:

- Due to the presence of product in ground water, additional soil contamination may be present in areas where soil excavation was not performed.
- Ground water at the UST excavation was contaminated with gasoline and BTEX; at the hoist excavation site, ground water was contaminated with diesel and oil.
- To assess ground water conditions, ground water monitoring was recommended.
- A limited ESA and a detailed subsurface sampling ESA were recommended to fully identify any remaining hazardous waste material or sources onsite. (Nowicki 2002a)

2.6.2.3 Voluntary Cleanup Program – 2002

In November 2002, the City of Tacoma requested assistance from Ecology, via their Voluntary Cleanup Program, with ongoing cleanup work at 2112 and 2122 S. Jefferson Avenue. In this request, the City of Tacoma indicated that work was being performed to determine the extent of ground water contamination and a plan was being developed for monitoring ground water. (Bailey 2002)

2.6.2.4 Limited Scope Environmental Site Assessment – 2002

In December 2002, Nowicki completed a Limited Scope ESA for the 2100 block of S. Jefferson Avenue on behalf of the City of Tacoma. The purpose of this work was to determine the historical occupation of the subject property and to research government environmental databases to identify potential sources of offsite contamination. This database search included a review of a total of 14 government databases, with the goal of identifying known hazardous materials sites in the vicinity of the subject property. (Nowicki 2002b)

The Limited Scope ESA determined that, prior to 1910, the subject property and the entire area surrounding it was platted into city blocks of downtown Tacoma. Residential occupation dominated land use through the mid-1930s when commercial occupation began to displace residences.

A total of 18 hazardous materials sites were located in the vicinity of the subject property at elevations equal to or higher than the subject property. Of these, only six sites had impacted ground water that had not yet been cleaned up. Only one of these sites was within 0.5 mile of the subject property. The database search also revealed the presence of one EPA National Priorities List site; however, this site was located more than 100 feet below the elevation of the subject property. (Nowicki 2002b)

Based on the findings of the database search and a site visit, the Limited Scope ESA concluded that, although nearby ground water contamination in the vicinity of the site had been positively identified, there was no known or suspected migration of hazardous materials to the subject property, and the impact potential to the subject property from registered hazardous materials sites appeared moderate to low. (Nowicki 2002b)

2.6.2.5 Subsurface Site Characterization Report – 2003

In April 2003, Nowicki completed a Subsurface Site Characterization investigation of the 2100 block of S. Jefferson Avenue on behalf of the City of Tacoma. The purpose of this work was to determine the extent of soil and ground water impacts from the former gasoline USTs and hoist. A total of 13 soil borings (SB1, SB1C, SB2A, and SB3 through SB12) were drilled using a truck-mounted Geoprobe™ to address these objectives (Figure 2-6). (Nowicki 2003a)

Continuous soil field screening was performed using a GEM GasTech™ combustible gas indicator from the ground surface to the total depth of each boring. These depths ranged from 3 to 14 feet bgs, depending on whether the

2. Site Description

boring was met with refusal (generally due to large rocks or suspected concrete fill material). Boring depths are provided on Figure 2-6. A total of 18 subsurface soil samples and nine ground water samples were collected. At least one subsurface soil sample was collected from each boring. Ground water was not encountered in borings SB1C, SB9, SB10, or SB11, most likely due to their shallow depths which ranged from 3 to 4 feet bgs. Ground water samples were collected from the remaining borings using a variable speed peristaltic pump having disposable nylon tubing. With few exceptions, all samples were analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds (i.e., soil samples from SB1, SB1C, and SB2A were not analyzed for BTEX compounds; and one soil sample from SB9 and ground water samples from SB7 and SB8 were not analyzed for diesel- or oil-range TPHs). Additionally, one soil sample collected from SB8 at 12 feet bgs (located north of the former hoist excavation and near a former suspected dry well) was also analyzed for volatile organic compounds (VOCs) and heavy metals. (Nowicki 2003a)

All sample results were compared to MTCA Method A cleanup levels (industrial and unrestricted for soil). Analytical results for soil samples were all below these cleanup levels, with the exception of soil in SB9 at 18 inches. This sample contained gasoline-range TPHs at 280 micrograms per kilogram ($\mu\text{g}/\text{kg}$), which was higher than the regulatory cleanup level of 100 $\mu\text{g}/\text{kg}$. The impacted soil was described as being confined to a thin grey silt lens between 1.5 and 3.5 feet bgs. This impacted soil was further described as appearing to be unrelated to the former hoist or the 2122 S. Jefferson Avenue UST excavations. (Nowicki 2003a)

Analytical results for ground water samples also were all below these cleanup levels, with the exception of samples collected from three borings (SB3, SB5, and SB6) placed near the former UST excavation. Specifically, the following exceedances were observed:

- SB3 – Oil-range TPHs at 1,300 $\mu\text{g}/\text{L}$.
- SB5 – Diesel-range TPHs at 1,700 $\mu\text{g}/\text{L}$ and oil-range TPHs at 870 $\mu\text{g}/\text{L}$.
- SB6 – Diesel-range TPHs at 5,300 $\mu\text{g}/\text{L}$ and oil-range TPHs at 3,400 $\mu\text{g}/\text{L}$. (Nowicki 2003a)

Based on site observations and analytical results, the Nowicki April 2003 *Subsurface Site Characterization Report* made the following conclusions and recommendations:

- There appeared to be no remaining residual impacted soils at the former UST (2122 S. Jefferson Avenue) and hoist excavations (2112 S. Jefferson Avenue).
- Ground water north and west of the former UST excavation (2122 S. Jefferson Avenue) had been impacted by diesel- and oil-range TPHs at concentrations above MTCA Method A cleanup levels, suggesting that product migration had occurred from the release location. The installation of ground water monitoring wells was recommended.

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- A localized area of gasoline impacted soil was discovered in the northeast corner of the block (2112 S. Jefferson Avenue; formerly 2102 S. Jefferson Avenue), away from the UST and hoist excavations. This contamination was expected to be localized and likely confined to approximately 5 cubic feet of soil within the top 3.5 feet of the soil horizon. Removal and offsite treatment of this soil was recommended.
- No soil impacts were identified at the former suspected dry well (2112 S. Jefferson Avenue). It was recommended that this “dry well” be abandoned. (Nowicki 2003a)

In addition to the above conclusions, the following additional observations should be noted:

- No borings were placed to the south, east, or northeast of the former hoist excavation (2112 S. Jefferson Avenue), in part due to the presence of wet, soft soil which limited Geoprobe™ truck access. Since the ground water table is shallow (approximately 3 feet bgs) and the direction of ground water flow is to the east with a slight northeasterly component, residual soil and ground water contamination, if any, would have been most likely found to the east/northeast of the excavation. During follow-on work conducted in 2003 (as described below in Section 2.6.2.6), one monitoring well (MW6) was placed approximately 30 feet east of this excavation. A soil sample was collected from 5 to 10 feet bgs and was analyzed for gasoline-, diesel-, and oil-range TPHs. Sample results did not exceed MTCA Method A industrial or unrestricted cleanup levels.
- The soils from the former hoist excavation (2112 S. Jefferson Avenue) were determined to be impacted by diesel- and oil-range TPH contamination (as well as gasoline-range TPH contamination) during the Nowicki 2002 UST and hoist removal site assessment and soil remediation investigation. Ground water from this excavation also was determined to be impacted by diesel- and oil-range TPH contamination during that investigation. However, during the Nowicki 2003 subsurface site characterization, ground water samples collected from this area (i.e., from SB7 and SB8) were not analyzed for diesel- and oil-range TPHs. During follow-on work conducted in 2003 (as described below in Section 2.6.2.6), one monitoring well (MW6) was placed approximately 30 feet east of this excavation. Analyses of ground water samples from this well have included diesel- and oil-range TPH on four occasions (as described in Section 2.6.2.7). These sample results do not indicate on-going ground water diesel contamination.
- As with the former hoist excavation, locations east and northeast of the former gasoline UST excavation (2122 S. Jefferson Avenue) can be expected to be hydrogeologically downgradient of this excavation. No borings were placed immediately adjacent to the east or northeast boundaries of this excavation. During follow-on work conducted in 2003 (as described below in Section 2.6.2.6), one monitoring well (MW1) was placed approximately 40 feet east of this excavation. A soil sample was collected from 5 to 10 feet bgs and was

analyzed for gasoline-, diesel-, and oil-range TPH. Sample results did not exceed MTCA Method A industrial or unrestricted cleanup levels. Analyses of ground water samples from this well also have included gasoline-, diesel-, and oil-range TPH on several occasions (as described in Section 2.6.2.7). All sample results were below MTCA Method A cleanup levels.

- The source(s) of diesel- and oil-range TPHs detected in SB3, SB5, and SB6 (2122 S. Jefferson Avenue) is not known, but may be associated with a possible diesel UST, the 1,000-gallon waste oil UST, or a hoist.

2.6.2.6 Ground Water Monitoring Well Installation – 2003

In September 2003, Nowicki completed a *Ground Water Monitoring Well Report* for 2112 & 2122 S. Jefferson Avenue on behalf of the City of Tacoma. The purpose of this work was to install onsite monitoring wells to provide a means of monitoring ground water conditions due to the known presence of gasoline- and diesel-range TPHs in ground water. Six monitoring wells (MW1 through MW6) were installed at 13 feet bgs (Figure 2-7). The wells were screened from 3 to 13 feet bgs. Water level measurements collected from these wells confirmed the shallow ground water flow direction as being to the east and northeast. (Nowicki 2003b)

During drilling, one composite subsurface soil sample was collected from 5 to 10 feet bgs from each boring, with the exception of the boring for MW5. In this boring, two subsurface soil samples were collected, one at 2.5 feet bgs and one at 5 feet bgs, from locations that appeared to be impacted by petroleum contamination. All samples were analyzed for gasoline-, diesel-, and oil-range TPHs. Samples from MW5 were additionally analyzed for BTEX compounds. Analytical results were compared to MTCA Method A industrial and unrestricted cleanup levels. No exceedances were observed. Ground water was not sampled at this time.. (Nowicki 2003b)

As a component of onsite activities, the former suspected dry well (called a percolation well in this report) was decommissioned by a licensed well service provider. This percolation well was described as being 4 feet in diameter and approximately 10 feet deep. It was constructed with a 6-inch-thick concrete casing having rows of 1-inch-diameter perforations. The well had a concrete rim and a steel plate at its top which served as a cover. (Nowicki 2003b)

2.6.2.7 Ground Water Monitoring – 2004 and 2005

Between March 2004 and March 2005, Nowicki conducted five rounds of monitoring well sampling at 2112 and 2122 S. Jefferson Avenue on behalf of the City of Tacoma. The purpose of these sampling events was to monitor ground water conditions (Nowicki 2005). These sampling events were conducted in March 2004, July 2004, October 2004, January 2005, and March 2005. The results of the sampling events are discussed below:

- **March 2004** – All six wells were sampled and analyzed for gasoline-, diesel-, and oil-range TPHs. Though diesel-range TPH was present in wells MW1,

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MW3, MW4, and MW5, and gasoline-range TPH was present in well MW4, no sample results exceeded MTCA Method A cleanup levels. (Nowicki 2004a)

- **July 2004** – All six wells were sampled and analyzed for diesel- and oil-range TPHs. Samples were not analyzed for gasoline-range TPH. Though diesel-range TPH was present in wells MW3 and MW4, no sample results exceeded MTCA Method A cleanup levels. (Nowicki 2004b)
- **October 2004** – Wells MW1, MW2, MW4, and MW6 were sampled and analyzed for diesel- and oil-range TPHs and BTEX compounds. Samples were not analyzed for gasoline-range TPH, and wells MW3 and MW5 were not sampled since construction debris covering the well monuments prevented access. All sample results were non-detect, with the exception of diesel-range TPH at MW6, which had a detection of 13,000 µg/L (well above the MTCA Method A cleanup level of 500 µg/L). The source of contamination in this well was suspected to be a surface source, such as asphalt debris and construction equipment at the site. (Nowicki 2004c)
- **January 2005** – Wells MW1, MW2, and MW6 were sampled and analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds. Wells MW3, MW4, and MW5 were not sampled since they were inaccessible due to construction equipment onsite. These wells were found to be damaged, with well MW5 being damaged beyond repair. All sample results were non-detect. (Nowicki 2005)
- **March 2005** – Wells MW3 and MW4 had been repaired, and MW5 had been reinstalled. Only these wells were sampled during this field event in order to supplement sampling conducted in January 2005. Samples were analyzed for gasoline-, diesel-, and oil-range TPHs and BTEX compounds. All sample results were non-detect. (Nowicki 2005)

During all sampling events, dedicated bailers were used to purge the wells and to collect ground water for analysis. The use of bailers for collecting volatile compounds, such as gasoline and BTEX, is not ideal since bailers striking the surface of the water tend to disperse these contaminants to the air, possibly reducing their concentrations in the collected samples. Further, their use requires pouring the collected material from the bailer to the sample jar, again creating an avenue for volatile compounds to be dispersed to the air and possibly reducing their concentrations in the collected samples. For these reasons, the lack of detections of gasoline-range TPH and BTEX compounds in the monitoring well samples may not be indicative of actual site conditions.

2.6.2.8 Washington State Department of Ecology, Further Action Determination Letter – 2006

In May 2006, Ecology issued a determination for further action at 2112 to 2122 S. Jefferson Avenue following a review of site-related environmental investigations (Rose 2006). Specifically, Ecology had the following comments regarding the site:

- The extent of potential residual petroleum-impacted ground water at the site did not appear to have been fully characterized. This concern was based on the positioning of the monitoring wells, since four of the six wells were located along the western boundary of the site in positions likely to be upgradient of known locations of petroleum contamination. Based on this concern, Ecology made the following recommendations:
 - The installation of two monitoring wells along the eastern site boundary, one east of MW3 and the other east of MW5 in the northeast corner of the site.
 - The installation of a third monitoring well in the vicinity of boring SB2A (which contained diesel-range TPH in ground water just below the MTCA Method A cleanup level) to determine whether any residual petroleum-impacted ground water existed in this area.
- The analytical suite applied to ground water samples collected at the site was incomplete. Ecology recommended resampling all wells for gasoline-, diesel-, and oil-range TPH analysis as well as sampling all wells for methyl tert-butyl ether, 1,2-dichloroethane, 1,2-dibromoethane, total lead, and selected locations for carcinogenic polycyclic aromatic hydrocarbons (cPAHs). Ecology further recommended quarterly monitoring and/or installing additional monitoring wells if contaminants of concern were detected.
- Gasoline-range TPH was detected above the MTCA Method A cleanup level in shallow soil near the northeast corner of the site. Ecology recommended further sampling in this area to determine the extent of residual petroleum-impacted soil.
- Sampling at the site had not included analysis for arsenic and lead in soils which could be expected to be present due to air emissions from the old Asarco smelter in north Tacoma. This comment was later retracted in 2012 since more recent smelter plume dispersion maps indicated the site was outside of suspected areas of impact.
 - Remedial actions, including a Cleanup Action Plan, would be necessary following proper soil and ground water characterization, if contamination was found. (Rose 2006)

2.6.2.9 Washington State Department of Ecology, Site Hazard Assessment Worksheet – 2010

In October 2010, Ecology completed a Site Hazard Assessment Worksheet for the 2112 to 2122 S. Jefferson Avenue cleanup. The site summary provided in this assessment stated that, on July 25, 2007, Ecology issued a letter to the City of Tacoma requesting an update regarding remediation activities. The City of Tacoma reportedly contacted Ecology on August 22, 2007 and indicated they did not intend to pursue a cleanup at that time. The site summary states that, on September 10, 2007, Ecology issued a Termination Letter, thereby removing the site from the Voluntary Cleanup Program and, on June 23, 2010, the City of

Tacoma was issued a letter indicating that a Site Hazard Assessment would be conducted by the TPCHD. This assessment was used to support a Washington Ranking Method site score which is used by Ecology to determine the potential threat to human health and the environment posed by a site if not cleaned up. The site score was determined to be 2, using only the ground water/human health threat (Ecology 2010), with a score of 1 representing the highest level of risk and a score of 5 representing the lowest. In general, sites scoring 1 or 2 are considered the highest priority for cleanup by Ecology.

2.6.3 2105 Tacoma Avenue S.

The property at 2105 Tacoma Avenue S. was the location of a gasoline station from 1934 to 1967. The service station building was demolished in 1973. Concern that USTs may remain on this property, and if present could be impacting soils and ground water at the site, led to an environmental investigation. This investigation is described below.

2.6.3.1 Phase II Borehole Investigation – 2012

In February 2012, Robinson Noble, Inc. (RNI) completed a Phase II Borehole Investigation of the 2105 Tacoma Avenue S. property on behalf of the City of Tacoma. This property is at the intersection of Tacoma Avenue S. and S. 21st Street. The purpose of this work was to investigate the locations of two USTs potentially remaining on the property. A map of the historic locations of the USTs was provided by TPCHD to RNI; however, documentation indicating whether or not they had been removed could not be located. The capacities and contents of these USTs were not noted in the *Phase II Borehole Investigation* report. (RNI 2012)

The property is flat on its western side along Tacoma Avenue S. An approximately 10-foot-high retaining wall separates the western portion of the property from the eastern portion which slopes moderately to the east. The depth to shallow ground water on the property was suspected to be approximately 50 feet bgs. (RNI 2012)

To address project objectives, a total of 11 soil borings (B1 through B11) were drilled using a truck-mounted Geoprobe™ (Figure 2-8). Borings B1 through B7 were drilled to 20 feet bgs on the upper (western) portion of the property near the suspected UST locations. Borings B8 through B11 were drilled on the lower (eastern) portion of the property. Boring B8 was drilled to 15 feet bgs, while borings B9, B10, and B11 were drilled to 10 feet bgs. Ground water was not encountered in any of the borings. (RNI 2012)

Soil samples were analyzed in an onsite mobile laboratory for gasoline (using NWTPH-Gx EPA Method 8021B) and BTEX. Soil samples also were analyzed at a fixed laboratory for diesel- and oil-range TPHs. One or two soil samples were collected from each boring for field and fixed laboratory analysis. No analytes were present above their corresponding detection limits. All detection limits were lower than applicable MTCA Method A cleanup levels. (RNI 2012)

A substantial void was encountered at 7.5 to 10 feet bgs in boring B2, which was placed near the suspected location of the USTs. The investigation recommended excavating this area to determine whether the void was associated with a UST, as well as proper abandonment of any USTs encountered. If no USTs were found, a recommendation to stabilize the void was made. (RNI 2012)

2.7 Projected/Proposed Site Uses

By virtue of the Jefferson Avenue Site's location and the fact that it is in the Sub-Area Plan footprint for the Puget Sound Regional Council's Sustainable Communities grant, the site is considered to represent a significant development potential by the City of Tacoma. In addition, the subject property lies within a Community Empowerment Zone and a Historically Underutilized Business Zone. The property is also located near low-income and minority communities. Redevelopment plans have not been finalized, but will be designed to strengthen and enhance other nearby community improvements in the University of Washington/Museum District, Hillside, and Old Brewery District by providing a link between these areas, thereby bringing in residents, services, and pedestrian traffic. Once redeveloped, the site will provide employment and, most likely, housing. (TPCHD 2011)

2.8 START-3 Site Visit

On February 14, 2012, a site visit of the Jefferson Avenue Site was conducted. Photographs of the site taken during the site visit are provided in Appendix A. Attendees included the following people:

- Joanne LaBaw, EPA Task Monitor (TM)
- Linda Ader, E & E Project Manager (PM)
- Greg Tanbara, TPCHD, Brownfields Coordinator
- Conor McCarthy, City of Tacoma, Assistant Division Manager
- Scott Rose, Ecology, Voluntary Cleanup Program

During the site visit, all properties were viewed. At 2112 and 2122 S. Jefferson Avenue, the six onsite monitoring wells were viewed, as well as the capped percolation well. Well MW6 was damaged and its orientation was somewhat skewed from being perpendicular to the ground surface (Site Visit Photo Log, Photograph 2). However, it appeared it still could be sampled and the well seal appeared intact. Well MW2 was missing its well cap. Following the site visit, the City of Tacoma replaced this well cap. The property at these addresses was being used for parking. A retaining wall was present on portions of the west side of these lots. To the north and south of this wall was a steep embankment. The ground surface was primarily covered with gravel, as were the properties extending south along S. Jefferson Avenue to S. 23rd Street. Some of this land is currently used by the City of Tacoma's maintenance department for heavy equipment storage. No drums or debris were present on these lots. The 1995

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USTs excavation soil stockpile, once located near the corner of S. 21st Avenue and S. Jefferson Avenue, was no longer present.

Features on the lot containing the former pest control business currently consist only of a paved parking area covering a portion of the lot. The remainder of this lot was covered with grass (Site Visit Photo Log, Photographs 3 and 4). No drums, debris, staining, or stressed vegetation were observed.

The area on the corner of S. Fawcett Avenue and S. 23rd Street, described during the Phase I ESA as being used for metal equipment storage, was viewed. This area was covered with grass (Site Visit Photo Log, Photograph 5). No drums, debris, staining, or stressed vegetation were observed.

The lots along S. Fawcett Avenue that formerly contained residences were walked, as were the lots where a grocery/printer, automobile storage (Site Visit Photo Log, Photographs 8 and 9), and a car wash were once located. No fill pipes were observed at the residences, which would have indicated the possible presence of heating fuel USTs. No evidence of the former car wash (e.g., drains or concrete platforms) was present. Additionally, no driveway aprons were present along S. Fawcett Avenue which, if present, may have indicated the entrance to the former car wash. The area suspected of having contained the car wash was observed to be approximately 5 feet lower in grade than the street. The lots along S. Fawcett Avenue were primarily covered with grass. A segment of land on the south side of S. Fawcett Avenue was fenced. No drums, debris, staining, or stressed vegetation were observed on these lots.

The lot at 2105 Tacoma Avenue S., on which a former gas station was located, still contained a retaining wall running north/south, essentially dividing the property in half. Land to the east of the retaining wall was approximately 10 feet lower in elevation than the western half. The upper (western) portion of the lot contained a concrete platform where the former gasoline station was located. A 6-inch concrete pipe opening was observed in the retaining wall, approximately 2 feet below the upper ground surface (Site Visit Photo Log, Photograph 7). No staining was observed on the pipe or the wall below the pipe. The property was the subject of a recent borehole investigation (i.e., the February 2012 RNI Phase II Borehole Investigation), and evidence of that work was present in the form of bentonite filled holes. No drums, debris, staining, or stressed vegetation were observed.

The remaining lots along Tacoma Avenue S. were covered with grass. These lots also did not contain drums, debris, staining, or stressed vegetation.

All grass-covered areas of the subject property are maintained by the City of Tacoma. Following the site visit, the City confirmed that no piping that could be indicative of UST fill or vent pipes has been observed during routine mowing and maintenance of the subject property.

3

Recognized Environmental Conditions

As discussed in Section 2, the 1999 Phase I ESA recommended several actions to address potential RECs identified during that investigation. Over the ensuing years, most of these actions have been undertaken by the City of Tacoma. Outstanding actions for these RECs include the following:

1. Assessing potential releases of solvents from historic automobile and printer operations, including the waste oil tank.
2. Assessing potential releases from former car wash drains.
3. Assessing potential releases from the pest control company (now inactive).
4. Assessing potential spills from drums.
5. Additional assessment of petroleum releases from USTs.

As detailed in the Nowicki 2003 *Subsurface Site Characterization Report*, one ground water sample was collected from 2112 S. Jefferson Avenue adjacent to the percolation well (described as a suspected dry well in that report). This sample was analyzed for VOCs, including chlorinated solvent compounds. The sample did not contain detectable concentrations of VOCs. It appears no other VOC analysis has been completed at the 6.4-acre site. For this reason, it appears action item #1, listed above, has not yet been fully addressed.

During the TBA site visit, two former car wash areas were visited (2125 S. Fawcett Avenue and 2122 S. Jefferson Avenue). Neither area contained drains. These areas have not been the subject of sampling. For this reason, action item #2 has not been addressed.

Action item #3, potential releases from the (former) pest control business (2139 S. Fawcett Avenue), has yet to be addressed.

Action item #4, relating to assessing spills from drums, has yet to be addressed. Drums have been removed, though the date(s) of their removal is not known. During the site visit, no staining or distressed soil was observed at former drum storage locations. The locations that once held drums are primarily along the east side of the parcels along S. Jefferson Avenue, as shown in Figures 2-3 and 2-4, though a few drums were present at the former pest business and just south of the

3. *Recognized Environmental Conditions*

former printer business. Sampling in these locations has not been conducted. For this reason, this action item is not considered to be resolved.

Action item #5 has largely been addressed. At least six gasoline USTs (four at 2112 S. Jefferson Avenue and two at 2122 S. Jefferson Avenue) have been removed, and contaminated soil associated with these tanks has been excavated. Contaminated soil associated with the 2002 gasoline tank removals on 2122 S. Jefferson Avenue was transported offsite. The contaminated soil associated with the 1995 gasoline tank removals at 2112 S. Jefferson Avenue was originally stockpiled on property at 2122 S. Jefferson Avenue, and then was moved to the north end of the site near the corner of S. 21st Street and S. Jefferson Avenue following the analysis of five soil samples which did not test positive for petroleum. Available records do not indicate whether this stockpile was removed from the site, though the location of the stockpile is now level with the surrounding terrain. It appeared that a 1,000-gallon waste oil tank and a 2,000-gallon gasoline UST may still be present on the south side of the former building location at 2122 S. Jefferson Avenue. Ground water monitoring wells have been installed at 2112 and 2122 S. Jefferson Avenue, though the analytical suite applied to samples collected from these wells did not include all constituents of concern to Ecology for sites with ground water petroleum contamination. For these reasons, this action item is not fully resolved.

Based on the information above and other historical site information, the following eight concerns were included as potential or known RECs for this TBA.

3.1 Potential Releases of Solvents from Former Automobile Repair and Servicing Businesses

Gasoline stations and automobile repair businesses were once present at 2105 Tacoma Avenue S., 2112 S. Jefferson Avenue, 2102 S. Jefferson Avenue, and 2122 S. Jefferson Avenue. With the exception of one soil sample from 2112 S. Jefferson Avenue, sampling for solvents at these properties has not been conducted. For this reason, possible solvent contamination at these parcels is considered a potential REC.

3.2 Potential Releases from the Former Printer Business

The printer business formerly located at 2102 S. Fawcett Avenue was identified as having potentially used solvents and paint pigments that may have contained heavy metals. Since this property has not been the subject of environmental sampling, possible solvent and metals contamination at this parcel is considered a potential REC.

3.3 Potential Releases from Former Car Washes

The former car washes have not been sampled (2125 S. Fawcett Avenue and 2122 S. Jefferson Avenue). Since these features have not been the subject of environmental sampling, possible solvent and petroleum contamination at these locations is considered a potential REC.

3.4 Potential Releases from the Former Pest Control Business

The pest control business, formerly located at 2139 S. Fawcett Avenue, is known to have used pesticides as part of business operations, and unmarked drums were documented to have been present in the parking lot for this business. Since this property has not been the subject of environmental sampling, possible pesticide contamination at this parcel is considered a potential REC.

3.5 Releases from Drums

Drums were once present on the eastern portion of the parcels along S. Jefferson Avenue, as were a few drums at the former pest business and one south of the former printer business. The contents of the drums were not known. Since these areas have not been the subject of environmental sampling, they are considered a potential REC.

3.6 Releases from USTs

Six USTs are known to have been removed from the subject site, and all soil exceeding MTCA Method A cleanup levels for petroleum-related compounds were removed from these UST excavations.

Records indicate that three USTs may still remain at 2122 S. Jefferson Avenue: one 1,000-gallon waste oil UST and one 2,000-gallon gasoline UST (both reportedly emptied in 1996), and one 1,000- to 4,000-gallon diesel UST. Further, USTs may have been present at the former property address of 2102 S. Jefferson Avenue, currently the northernmost portion of the 2112 S. Jefferson Avenue lot and the location of a former gasoline station.

Prior to this TBA, six monitoring wells had been installed at the site on the 2112 and 2122 S. Jefferson Avenue parcels. Several rounds of ground water monitoring have been conducted, with the most recent round having occurred in 2005. Ecology had recommended the placement of three additional wells on these properties to further assess shallow ground water. Ecology also requested a broader analytical suite be applied to ground water samples than used in the past, in order to include fuel additives and lead.

3.7 Gasoline-Contaminated Soil on the Northeast Corner of the Site (i.e., 2112 S. Jefferson Avenue)

As part of the work conducted for the 2003 Subsurface Site Characterization Report, a boring was placed on the northeast corner of the Jefferson Avenue Site (SB9), a location that was outside of the 2002 UST and hoist excavations. A single shallow soil sample was collected from this boring at 18 inches bgs and the gasoline-range TPH was detected in this sample above the MTCA Method A cleanup level. As this area has not been the subject of soil removal, Ecology has recommended additional sampling of shallow soil at this location.

3.8 Potential Releases of PCBs from Hydraulic Hoists

Hydraulic hoists were encountered within the businesses at 2112 and 2120 S. Jefferson Avenue. The hoist at 2112 S. Jefferson Avenue is known to have been removed. The outcome of the hoist at 2120 S. Jefferson Avenue is not known. It appears that neither hoist area was sampled for PCBs. In addition, the former gasoline station at 2105 Tacoma Avenue S. has been described as also having once been an automobile service station and, as such, may have contained a hydraulic hoist. Possible PCB contamination at these hoist areas remains an outstanding concern at the site and, for this reason, is considered a potential REC.

4

Investigation and Results

E & E conducted field activities at the Jefferson Avenue Site on April 30, 2012 and from May 21, 2012 to May 25, 2012. Fieldwork was conducted in coordination with the City of Tacoma and the TPCHD.

4.1 Regulatory Standards

It is anticipated that the site will be used for new employment opportunities and most likely for housing. MTCA Method A ground water cleanup levels and MTCA Method A soil cleanup levels for unrestricted land uses established under Washington Administrative Code 173-340-740(2) have been selected as appropriate cleanup levels for the site. The analytical suite applied to soil and ground water collected from the site included gasoline-range TPH, diesel- and oil-range TPHs, target analyte list (TAL) metals, VOCs, semivolatile organic compounds (SVOCs), pesticides, and PCBs. Regulatory standards (Method A) applied to this project are presented in Table 4-1.

MTCA Method A 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 is intended to be used at relatively simple sites with few hazardous substances. Further, when petroleum is the only contaminant, Method A generally can be used to establish soil cleanup levels. Method A values are usually the most protective and generally take into account all possible pathways of exposure. The point of compliance for human health is established in the soils from the ground surface to 15 feet bgs (Washington Administrative Code 173-340-740(6)(d)). Deeper than 15 feet bgs, the soil cleanup levels are based on ground water protection levels.

Ecology provides regulatory criteria for cPAHs Toxicity Equivalent Concentrations (TECs) for soil and water samples. The TEC is used to assess a sample's toxicity by expressing the results of all cPAHs detected as benzo(a)pyrene (BaP). This expression is determined by multiplying each cPAH by its corresponding Toxic Equivalency Factor (TEF). TEFs approximate each cPAH's toxicity relative to the toxicity of BaP (Ecology, n.d.). BaP TECs for soil and water samples that were analyzed for cPAHs have been calculated for this project. These calculations are provided in Tables 4-2 and 4-3. When an analyte was not detected in a sample, the undetected value was divided in half and the result was multiplied by the TEF to be used in the BaP calculation.

4.2 Analytical Methods

Fifty-three samples (including seven quality control samples and six investigation-derived waste [IDW] samples) were collected during this TBA and were submitted for fixed laboratory analysis. The samples were analyzed in varying combinations for VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, pesticides, PCBs, gasoline-range TPH, diesel- and oil-range TPHs, and TAL metals including lead.

Copies of quality assurance/quality control (QA/QC) and data validation memoranda are provided in Appendix B, and chain-of-custody forms are provided in Appendix C. The following samples were submitted to fixed laboratories for analysis:

- **VOCs.** Forty-two samples were submitted for VOC analysis using EPA Method SOM01.2. In addition, water samples were also analyzed by Selected Ion Monitoring (SIM) to meet the regulatory standard of 0.2 µg/L for vinyl chloride. The samples were submitted to A4 Scientific, an EPA Contract Laboratory Program (CLP) laboratory, located in The Woodlands, Texas.
- **SVOCs.** Twenty-six samples were submitted for SVOC analysis using EPA Method SOM01.2 by SIM. The samples were submitted to A4 Scientific, an EPA CLP laboratory located in The Woodlands, Texas.
- **Pesticides.** Eleven samples were submitted for pesticides analysis using EPA Method SOM01.2. The samples were submitted to A4 Scientific, an EPA CLP laboratory, located in The Woodlands, Texas.
- **PCBs.** Thirty samples were submitted for PCB analysis using EPA Method SOM01.2. This method was modified for water samples to ensure Aroclor detection limits would meet the regulatory standards. The samples were submitted to A4 Scientific, an EPA CLP laboratory, located in The Woodlands, Texas.
- **TAL Metals.** Thirty-four samples were submitted for TAL metals analysis using EPA Method ISM01.2. The samples were submitted to Bonner Analytical Testing, an EPA CLP laboratory, located in Hattiesburg, Mississippi.
- **Gasoline-Range TPH.** Thirty-four samples were submitted for gasoline-range TPH using Method NWTPH-Gx. The samples were submitted to Manchester Environmental Laboratory (MEL), an EPA laboratory, located in Port Orchard, Washington.
- **Diesel-, Residual-, and Oil-Range TPH.** Thirty-one samples were submitted for diesel-, residual-, and oil-range TPH using Method NWTPH-Dx. The samples were submitted to MEL, an EPA laboratory, located in Port Orchard, Washington.

4.3 Reporting of Sample Results

The analytical results summary tables provided in this section are a condensed version of the laboratory data provided in Appendix B. Omitted data and the presentation of data in the summary tables are as follows:

- Analytes that were not detected in any samples were omitted from their respective tables.
- All detected concentrations are shown in bold type; a non-detect concentration is shown as the detection limit reported by the laboratory (e.g., 0.66 U).
- The regulatory standards provided in the first column of these tables were used as criteria values in determining whether contamination is present in the samples.
- Analytes detected at concentrations greater than the criteria value were considered a potential concern, and the concentration is shaded.
- Analytes with no comparative criteria levels are listed in the tables, but could not be qualitatively evaluated.

Based on EPA Region 10 policy, evaluation of aluminum, calcium, iron, magnesium, potassium, and sodium (i.e., common earth crust metals) is generally used only in mass tracing, which is beyond the scope of this report. Furthermore, these analytes are not associated with toxicity to humans under normal circumstances (EPA 1996). For these reasons, these analytes are not included in the evaluation or discussion, but are provided in the analytical summary tables if they were detected above the instrument detection limit.

4.4 Sampling Design

A judgmental sampling design was used for the Jefferson Avenue Site TBA to fulfill project-specific objectives by collecting biased data required for preliminary site characterization. The following subsections describe the types of sampling, analysis, and measurements that were conducted. Samples were collected in accordance with an approved sampling and quality assurance plan (SQAP) (E & E 2012). Photographic documentation of the sample collection event is provided in Appendix A.

When deviations from the SQAP were required, they were noted in the field logbook, recorded on the sample plan alteration forms (Appendix D), and approved by the EPA TM. Deviations from the SQAP are also detailed below.

A total of 38 samples were collected from the Jefferson Avenue Site properties during the field event (Figure 4-1). A description of each sample submitted for fixed laboratory analysis is provided in Table 4-4.

Table 4-5 summarizes the sample coding system used for formulating sample numbers. For example, the sample number JA01SB04 indicates the following:

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- JA for the source code (in this case, for the Jefferson Avenue site).
- 01 for the sequential number of samples from a given source by matrix (in this case, the first subsurface soil sample).
- SB for the sample matrix (in this case, subsurface soil).
- 04 for the maximum depth of the sample interval.

The frequencies of exceedance of regulatory criteria values are provided in Table 4-6 (soil samples) and Table 4-7 (water samples). Summaries of analytical data are provided in Table 4-8 (soil samples) and Table 4-9 (ground water samples).

Investigative activities conducted at the site included a geophysical survey, subsurface soil sampling from borings, test pit excavation, installation and sampling of new monitoring wells, and sampling of existing monitoring wells. Borehole and monitoring well logs are provided in Appendix E. To address remaining RECs, the following sampling activities were conducted.

4.4.1 2102 S. Fawcett Avenue (former printer)

A direct-push Geoprobe™ was used to drill two borings (JA01 and JA02) to 12 feet bgs on the eastern portion of the property (Field Event Photo Log, Photo 1). The SQAP proposed drilling these borings to 16 feet bgs; however, compacted soil conditions prevented drilling beyond 12 feet. Soil samples were collected from 4-foot intervals for a total of six samples at this REC (JA01SB04, JA01SB08, JA01SB12, JA02SB04, JA02SB08, and JA02SB12) and were analyzed for VOCs including solvents and TAL metals including lead. No VOCs were detected, and sample results for metals did not exceed MTCA Method A cleanup levels (Table 4-8).

All soil intervals were screened for signs of contamination (staining or odors) or elevated photoionization detector/flame-ionization detector (PID/FID) field screening readings, though none were observed. Ground water samples were not collected since ground water was not encountered.

4.4.2 2139 S. Fawcett Avenue (former pest control business)

A direct-push Geoprobe™ was used to drill three borings to 12 feet bgs, two on the eastern side of the parcel (JA03 and JS04), and one near the location where drums were stored in the past (JA05) (Field Event Photo Log, Photos 2 and 3). The SQAP proposed drilling these borings to 16 feet bgs; however, compacted soil conditions prevented drilling beyond 12 feet. Soil samples were collected from 4-foot intervals for a total of nine samples (JA03SB04, JA03SB08, JA03SB12, JA04SB04, JA04SB08, JA04SB12, JA05SB04, JA05SB08, and JA05SB12) and were analyzed for pesticides. Alpha-chlordane was detected in one sample (sample JA03SB04) at 2 µg/kg, just above the detection limit of 1.9 µg/kg; and methoxychlor was detected in four samples (JA03SB12, JA04SB04, JA04SB08, and JA04SB12) at concentrations ranging from 20 to 220 µg/kg (Table 4-8). MTCA Method A cleanup levels for these compounds do not exist

and no other pesticides were detected.

All soil intervals were screened for signs of contamination (staining or odors) or elevated PID/FID field screening readings, though none were observed. Ground water samples were not collected since ground water was not encountered.

4.4.3 Properties along S. Jefferson Avenue (former automobile repair business and former gasoline stations)

In order to assess current environmental conditions on these properties, a geophysical survey was conducted, test pits were excavated, new monitoring wells were installed, and existing monitoring wells were sampled, as described below.

4.4.3.1 Geophysical Survey and Test Pits

On April 30, 2012, the START-3 met with employees of Applied Professional Services, a subcontracted geophysical survey company, at the Jefferson Avenue Site for the purpose of conducting a geophysical survey in an attempt to locate USTs on the properties along S. Jefferson Avenue. Records indicate that up to three USTs may remain at 2122 S. Jefferson Avenue (one 1,000-gallon waste oil UST, one 2,000-gallon gasoline UST, and one 1,000- to 4,000-gallon diesel UST). Further, USTs may have been present at a former gasoline station at the former property address of 2102 S. Jefferson Avenue.

The geophysical survey was conducted on all parcels from 2122 S. Jefferson Avenue north to S. 21st Street, which included all locations/addresses suspected of containing USTs. A Geophysical Survey Systems, Inc. 400 MHz antenna with the SIR 3000 control unit was first used to survey these locations. This unit's Utility Scan module was used, which is most effective at identifying anomalies from 0 to 8 feet bgs in depth. Then a Schonstedt Magnetometer was used to try and identify magnetic targets. No USTs were located; however, two areas containing several small metallic anomalies were found. Each of these areas was in a location suspected of possibly containing USTs (i.e., the area north of the former gasoline station at former property address 2102 S. Jefferson Avenue, and the area south of the former gasoline and service station located at 2112 S. Jefferson Avenue).

On May 22, 2012, the START-3 met employees of the subcontracted excavation contractor, Langseth Environmental Services, Inc., (Langseth), at the site for the purposes of excavating locations where subsurface anomalies had been identified and removing USTs, if encountered. Langseth is an Ecology certified UST removal contractor.

A total of nine test pits (Test Pit 1 through 9) were excavated (Figure 4-1). Test Pits 3 through 8 corresponded to subsurface anomalies encountered during the geophysical survey. Test Pits 1 and 2 corresponded to two additional anomalies identified during utility locating activities conducted on behalf of Langseth prior to excavating. Test Pit 9 was conducted in an area that did not contain any

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subsurface anomalies, but which was considered by the START-3 to be highly likely to be the location of the 1,000-gallon waste oil and 2,000-gallon gasoline USTs at 2122 S. Jefferson Avenue. In deeper excavations (i.e., those extending below approximately 2 feet bgs), compacted glacial till was encountered from approximately 2 feet bgs to the remainder of the excavation depth. Items found in each test pit are described below:

- **Test Pit 1:** This test pit measured approximately 6 feet x 6 feet x 1 foot deep. An out-of-use catch basin was encountered. The basin had a perforated metal lid (Field Event Photo Log, Photo 7) measuring approximately 3 feet x 6 feet. Beneath the lid was a concrete vault containing some water (Field Event Photo Log, Photo 4). The vault had a plugged discharge pipe on its eastern interior wall which previously drained the vault.
- **Test Pit 2:** This test pit measured approximately 5 feet x 3 feet x 2 feet deep. This location contained building footing and some 1-inch rebar (Field Event Photo Log, Photo 5). The pit also contained a sawn-off 12-inch diameter metal post; likely a former sign post (Field Event Photo Log, Photo 6).
- **Test Pit 3:** This test pit measured approximately 6 feet x 3 feet x 4 feet deep. This location contained scrap metal and rebar (Field Event Photo Log, Photo 8).
- **Test Pit 4:** This test pit measured approximately 3 feet x 3 feet x 2 feet deep. This location contained large pieces of scrap metal (Field Event Photo Log, Photo 9).
- **Test Pit 5:** This test pit measured approximately 6 feet x 3 feet x 5 feet deep. This location also contained pieces of scrap metal (Field Event Photo Log, Photos 10 and 11).
- **Test Pit 6:** This test pit measured approximately 6 feet x 8 feet x 2.5 feet deep. This location contained a horizontally continuous asphalt pad at approximately 18 inches bgs. Plastic sheeting was present under the pad, and concrete rubble was found under the sheeting. Soil intermixed with the rubble had a petroleum odor. A reading of 13 parts per million (ppm) was recorded on the PID from soil excavated from this test pit. Perched water infiltrated the excavation.

A soil sample (TE06SB) was collected from excavated soil that had a petroleum odor. In addition, a water sample (TE06GW) was collected from water that infiltrated the excavation. Both samples were analyzed for gasoline-range TPHs, diesel- and oil-range TPHs, TAL metals including lead, VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs.

The soil sample did not contain analytes above corresponding MTCA Method A cleanup levels (see Table 4-8). With the exception of arsenic (24 µg/L), lead (812 µg/L), and the TEC value for BaP (0.1296 µg/L), no other analytes exceeded the MTCA Method A cleanup level in the water sample (see Table 4-9). Since this was a turbid sample, it is suspected that the concentrations of

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arsenic and lead in this sample are a reflection of suspended soil particles rather than an indication of contamination.

- **Test Pit 7:** This test pit measured approximately 4 feet x 3 feet x 2 feet deep. A one-inch diameter metal pipe was encountered in the pit. The pipe appeared to be electrical conduit. Plastic sheeting, similar to that observed in Test Pit 6, was encountered at approximately 12 inches bgs.
- **Test Pit 8:** This test pit measured approximately 4 feet x 3 feet x 2 feet deep. Sawn-off metal pipes were encountered having diameters of 1 inch and 1.25 inches. These did not appear to be fill or distribution pipes (Field Event Photo Log, Photo 13). Plastic sheeting also was encountered in this test pit at approximately 18 inches bgs (Photo Log, Field Event Photo 12).
- **Test Pit 9:** This test pit measured approximately 20 feet x 3 feet x 8 feet deep at its deepest point. This test pit was near the 2003 Nowicki gasoline UST excavation at 2122 S. Jefferson Avenue. The test pit had a very strong petroleum odor. Excavated soil had PID readings up to 500 ppm. Fill material was evident in this excavation by its orange appearance (Field Event Photo Log, Photo 14). Two soil samples were collected from Test Pit 9, one at the western end at approximately 4 feet bgs (TE09SB04) and one at the eastern end at approximately 7 feet bgs (TE09SB07). Perched water infiltrated the trench. This water was not sampled since a shallow monitoring well (MW1), intended for sampling, was present approximately 20 feet east of the test pit (downgradient) and would provide a better indication of possible impacts to ground water in the saturated zone (i.e., as opposed to rain water perched on top of the confining layer). Soil sample results from this test pit did not exceed MTCA Method A cleanup levels (Table 4-8).

No USTs were encountered. All test pits were backfilled with excavated soil. Metal scraps and pipe sections that were encountered during excavation were consolidated in one location near the western hillside. It is known that slag from the Asarco smelter was widely used throughout Tacoma for fill purposes. This slag is a black, rock-like material that contains several heavy metals including arsenic as well as copper and lead (EPA 1994). No such slag material was observed in the test pits' excavations.

4.4.3.2 Existing Monitoring Wells

The six existing monitoring wells (MW1 through MW6) were resampled using low-flow sampling techniques. Three bollards were placed around monitoring wells MW1, MW4, MW5, and MW6 to protect them from vehicle traffic since these areas are not paved. Bollards were not placed around MW2 and MW3 since these well locations were already protected by the placement of Ecology blocks. All ground water samples (MW01GW through MW06GW) were analyzed for gasoline-range TPH, diesel- and oil-range TPHs, TAL metals including lead, VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs. Sample results did not exceed MTCA Method A cleanup levels (Table 4-9).

4.4.3.3 New Monitoring Wells

An auger drill rig was used to install three new flush-mount 2-inch diameter monitoring wells: one (MW7) east of former boring SB2A (which contained diesel-range TPH in ground water just below the MTCA Method A cleanup level), one (MW8) east of MW3, and one (MW9) east of MW5 and near former boring SB9 (which contained gasoline-range TPH above the MTCA Method A cleanup level in a soil sample collected from 18 inches bgs), as per Ecology recommendations.

Well MW7 is near the location of a large former drum storage area. Wells were to be drilled to 13 feet bgs and were to be screened from 3 to 13 feet bgs to replicate the design of the existing monitoring wells; however the depth of well MW7 was extended to 23 feet bgs since ground water was deeper than expected. This well was screened from 3 to 23 feet bgs to ensure it would span the water table. For well MW7, water was first encountered at 19 feet bgs. Water was first encountered at 10 feet bgs for wells MW8 and MW9. All three wells were under moderate artesian conditions. Three bollards were placed around each monitoring well to protect them from vehicle traffic since their locations are not paved.

During drilling, a spilt-spoon sampler was used to collect subsurface soil samples from 4-foot intervals from the ground surface to 12 feet bgs. A total of nine subsurface soil samples were collected during monitoring well drilling including:

- Samples MW07SB04, MW07SB08, and MW07SB12 from MW7;
- Samples MW08SB04, MW08SB08, and MW08SB12 from MW8; and
- Samples MW09SB04, MW09SB08, and MW09SB12 from MW9.

Ground water was collected from each newly installed well using low-flow sampling techniques (MW07GW, MW08GW, and MW09GW).

All ground water and soil samples were analyzed for gasoline-range TPHs, diesel- and oil-range TPHs, TAL metals including lead, VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs. All soil intervals were screened for signs of petroleum contamination (staining or petroleum odors) or PID/FID field screening readings, though none were observed.

With the exception of benzo(a)pyrene in one soil sample collected from 0 to 4 feet bgs in MW8 (120 µg/kg) and arsenic in one ground water sample collected from MW9 (48.3 µg/L), soil and water sample results did not exceed MTCA Method A cleanup levels (Tables 4-8 and 4-9). In order to confirm the presence of arsenic above the regulatory standard in ground water at MW9, confirmation samples were collected from this well on October 18, 2012. Samples were once again collected using low-flow sampling techniques. Samples were analyzed for total and dissolved arsenic (samples MW09GWT and MW09SGD, respectively). Arsenic concentrations in both samples (41.1 and 42.9 µg/L, respectively)

exceeded the MTCA Method A cleanup level (Table 4-9). It should be noted that Asarco slag material (known to contain arsenic) was not observed in soil from this boring during drilling.

4.4.4 2105 Tacoma Avenue S. (former gasoline station)

An auger drill rig was used to install one flush-mount 2-inch diameter shallow ground water monitoring well (MW10) east of the former gasoline service station, below (east) the retaining wall. The well was placed in close proximity to the concrete pipe emerging near the top of this wall. The well was drilled to 38 feet bgs. Water was first encountered at 34 feet bgs. This well was screened from 18 to 38 feet bgs to ensure it would span the water table after completion. One ground water sample (MW10GW) was collected from this well using low-flow sampling techniques for analysis of gasoline-range TPHs, diesel- and oil-range TPHs, TAL metals including lead, VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs. Sample results did not exceed MTCA Method A cleanup levels (Table 4-9).

4.5 Historic Preservation Act Considerations

In order to coordinate TBA activities with the Historic Preservation Act, the TPCHD submitted a Historic and Cultural Resources Project Review Sheet to the Washington State Department of Archaeology and Historic Preservation. The sheet outlined proposed intrusive TBA activities including drilling and excavation work. This sheet indicated that the artifacts that may be encountered would likely be limited to industrial debris and residential artifacts.

If such artifacts or indications of human remains were encountered, work would have immediately stopped at that location and the EPA TM would have been immediately notified. No such artifacts or remains were encountered either during drilling or excavation activities.

Correspondence relating to Historic Preservation Act coordination is provided in Appendix F.

4.6 Global Positioning System

Global Positioning System (GPS) coordinates of TBA sample locations and test pits were collected utilizing a Trimble™ Geo XH handheld unit with a Zephyr™ external antenna and a Trimble ProXR™ with a TDC1 data logger. In some cases, the accuracy of this locational data was poor. In these cases, GoogleEarth™ was used to place the feature based on knowledge of actual locations to obtain corrected coordinates. GPS/GoogleEarth™ coordinates by feature are listed in Appendix G.

4.7 Investigation-Derived Waste

IDW generated during the Jefferson Avenue Site TBA sampling event included disposable sampling supplies, disposable personal protection equipment, soil cuttings, well purge water, and decontamination water. All soil cuttings from

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drilling operations and purge/decontamination water were contained in 55-gallon drums. In total, 15 drums of IDW were generated including seven drums containing soil cuttings and eight containing purge/decontamination water. All disposable IDW (i.e., sampling supplies and personal protection equipment) was double-bagged in opaque plastic bags and disposed of at the local municipal landfill in Seattle, Washington. Materials that could be recycled (plastic, cardboard, steel, and paper) were segregated from trash at the EPA warehouse in Seattle, Washington, and collected by Waste Management.

Disposal decisions for drums containing soil cuttings were based on results from soil samples collected during drilling. Based on these results, it was determined that this IDW can be disposed as non-hazardous material. Disposal decisions for the drums containing purge/decontamination water were based on analytical results from six IDW water samples (ID01WT through ID06WT). Table 4-10 provides these sample results. Based on these results, it was determined that purge/decontamination water IDW also can be disposal as non-hazardous material. At present, E & E is coordinating pick-up of IDW drums and transport of them to the disposal facility.

5

REC Outcomes and TBA Summary

The Jefferson Avenue Site consists of two city blocks bounded by S. 21st and S. 23rd Streets, and by Tacoma Avenue S. and S. Jefferson Avenue in Tacoma, Washington. Historically, various portions of the site have been in use since 1896. The site was originally heavily developed with small residences, and gradually thinned over time. By 1999, only thirteen structures remained on the site, most of which were constructed prior to 1920. The parcels' uses in 1999 were light commercial and residential. The commercial uses included: gas stations and automobile repair businesses, used car sales, a truck rental business, a car washing business, a printing business, and a pest control company. By 2002, all structures at the site had been demolished. At that time, vegetation was cleared and the site was graded and hydroseeded.

The City of Tacoma considers the Jefferson Avenue Site to have significant development potential, by virtue of its location and the fact that it is in the Sub-Area Plan footprint for the Puget Sound Regional Council's Sustainable Communities grant. In addition, the subject property lies within a Community Empowerment Zone and a Historically Underutilized Business Zone. Redevelopment plans have not been finalized, but will be designed to strengthen other nearby community improvements. Once redeveloped, the site will provide employment and also possibly housing.

The site has been the subject of several previous environmental assessments, most of which have focused on two former gas stations. A SEPA EIS and a Phase I ESA were completed for the entire 6.4-acre property in 1999. The Phase I ESA recommended several actions to address potential RECs identified during that investigation. Over the ensuing years, most of these actions have been undertaken by the City of Tacoma.

Outstanding RECs from the 1999 Phase I ESA were the focus of this TBA. With few exceptions, the TBA was conducted in accordance with the EPA-approved SQAP. Deviations from the planned sampling approach were approved by the EPA TM and are described in sample plan alternation forms (Appendix D). The deviations included a reduction of soil boring depths at the former printer business and the former pest control business, no ground water sampling on those two properties, and re-sampling of MW09 for total and dissolved arsenic.

The primary TBA field sampling event took place at the site in May 2012. Fifty-three samples (including seven quality control samples and IDW samples) were

collected during this TBA and were submitted for fixed laboratory analysis. The samples were analyzed in varying combinations for VOCs including solvents, SVOCs, pesticides, PCBs, gasoline-range TPHs, diesel- and oil-range TPHs, and TAL metals including lead.

5.1 RECs Outcomes

The following sections briefly reiterate the eight outstanding RECs, the remaining environmental concerns at each (if any), and the outcome of this TBA as it relates to each REC.

5.1.1 Potential Releases of Solvents from Former Automobile Repair and Servicing Businesses

Gasoline stations and automobile repair businesses were once present at 2105 Tacoma Avenue S., 2112 S. Jefferson Avenue, 2102 S. Jefferson Avenue, 2020 S. Jefferson Avenue, and 2122 S. Jefferson Avenue. With the exception of one soil sample from 2112 S. Jefferson Avenue, sampling for solvents at these properties had not been conducted in past investigations. For this reason, possible solvent contamination at these parcels was considered a potential REC.

Sampling and analyses of ground water at each of these parcels during the TBA did not reveal the presence of solvents, nor were solvents detected in subsurface soil samples collected from 2102, 2020, 2112, and 2122 S. Jefferson Ave. Based on this data, it appears that a release of solvents has not occurred from these businesses. Further assessment of this REC does not appear necessary.

5.1.2 Potential Releases from the Former Printer Business

The printer business formerly located at 2102 S. Fawcett Avenue was identified as having potentially used solvents and paint pigments that may have contained heavy metals. Since this property had not been the subject of previous environmental sampling, possible solvent and metals contamination at this parcel was considered a potential REC. Sampling and analysis of subsurface soil on this parcel during the TBA did not reveal the presence of solvents or the presence of heavy metals above MTCA Method A cleanup levels. Based on this data, it appears that a release of solvents and/or metals has not occurred from this business. Further assessment of this REC does not appear necessary.

5.1.3 Potential Releases from Former Car Washes

The former car washes have not been sampled (2125 S. Fawcett Avenue and 2122 S. Jefferson Avenue). Since these features had not been the subject of environmental sampling, possible solvent and petroleum contamination at these locations was considered a potential REC. During the TBA site visit, the two former car wash areas were visited. Neither area currently contains drains.

Monitoring wells had previously been installed at locations downgradient of these car washes (i.e., MW1 through MW6). During the last round of ground water monitoring conducted for the City of Tacoma in 2005, diesel and gasoline contamination was not detected in these wells. For these reasons, it was decided

5. REC Outcomes and TBA Summary

that sampling data obtained during the TBA field event from new (i.e., MW7, MW8, and MW9) and existing wells would be used to assess this REC.

Sampling and analysis of ground water from existing and new monitoring wells during this TBA did not reveal the presence of solvents or petroleum-related compounds. Based on this data, it appears that a release of solvents and/or petroleum has not occurred from these car washes. Further assessment of this REC does not appear necessary.

5.1.4 Potential Releases from the Former Pest Control Business

The pest control business formerly located at 2139 S. Fawcett Avenue is known to have used pesticides as part of business operations, and unmarked drums were documented to have been present in the parking lot for this business. Since this property had not been the subject of environmental sampling, possible pesticide contamination at this parcel was considered a potential REC.

Sampling and analysis of subsurface soil samples for pesticides on this parcel during the TBA revealed the presence of alpha-chlordane and methoxychlor; however, MTCA Method A cleanup levels do not exist for these compounds. Based on this data, it appears that no significant release of pesticides has occurred from this business. Further assessment of this REC does not appear necessary.

5.1.5 Releases from Drums

Drums once were present on the eastern portion of the parcels along S. Jefferson Avenue, as were a few drums at the former pest business and one south of the former printer business (see Figure 2-3). The contents of the drums were not known. Since these areas had not been the subject of environmental sampling, they were considered a potential REC. By the time of the TBA site visit, all drums had been removed, though the date of their removal and final disposition is not known. During the TBA site visit, the locations that formerly contained drums were viewed. Discoloration, stained soil, and stressed vegetation were not present.

During the TBA field event, subsurface soil samples were collected from one boring placed at the location of the former drums on the pest control business parcel and existing and new monitoring wells (wells MW1 through MW9) were sampled on the parcels along S. Jefferson Avenue. Wells MW1 through MW9 are either near or downgradient of the drum locations on the S. Jefferson Avenue parcels. Two of these wells, MW2 and MW7, are topographically lower than the drum location at the pest control business as well as being generally hydraulically downgradient.

Subsurface soil samples were analyzed for pesticides and the ground water samples were analyzed for gasoline-range TPH, diesel- and oil-range TPHs, TAL metals including lead, VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs. Subsurface soil and ground water sample results did not exceed available MTCA Method A cleanup levels. Based on this

data, it appears that significant releases from former drums have not occurred. Further assessment of this REC does not appear necessary.

5.1.6 Releases from USTs

Six USTs are known to have been removed from the subject site, and all soil exceeding MTCA Method A cleanup levels for petroleum-related compounds were removed from related UST excavations. Available records had indicated that three additional USTs may still remain at 2122 S. Jefferson Avenue: one 1,000-gallon waste oil UST and one 2,000-gallon gasoline (both reportedly emptied in 1996) UST, as well as one 1,000- to 4,000-gallon diesel UST. In addition, historic information indicated that USTs may also still be present at the former property address of 2102 S. Jefferson Avenue; currently the northernmost portion of the 2112 S. Jefferson Avenue lot, and the location of a former gasoline station.

In an attempt to locate USTs that may remain at the site, a geophysical survey was conducted. All subsurface anomalies were later excavated, as were additional anomalies identified during the utility locate.

A total of nine test pits (Test Pit 1 through 9) were excavated; however, no USTs were encountered. Analysis of soil sampled from two test pits exhibiting petroleum odors and elevated PID readings (Test Pit 6 and Test Pit 9) did not detect the presence of gasoline, diesel, oil, solvents, or metals above MTCA Method A cleanup levels. Water sampled from Test Pit 6 and ground water sampled from MW1 (i.e., downgradient of Test Pit 9) did not contain elevated concentrations of either petroleum-related compounds or solvents above MTCA Method A cleanup levels. With the exception of arsenic and lead in the water sample collected from Test Pit 6, metals were not detected above MTCA Method A cleanup levels in water matrix samples. Since the water sample from Test Pit 6 was turbid, it is likely that the elevated concentrations of these analytes were the result of suspended soil particles in the sample, rather than a true indication of regulatory exceedances.

In order to more completely address the possible presence of petroleum contamination in relation to USTs, Ecology recommended the placement of three additional monitoring wells on these properties to further assess shallow ground water. Ecology also requested that a broader analytical suite be applied to ground water samples than had been applied in the past in order to include fuel additives and lead. Three new monitoring wells (MW7, MW8, and MW9) were installed on the eastern portion of parcels along S. Jefferson Avenue for this TBA. As requested by Ecology, one was placed east of former boring SB2A, one was east of MW3, and one east of former boring SB9; the analytical suite applied to these, as well as the six existing monitoring wells (MW1 through MW6) was expanded.

During drilling, three subsurface soil samples were collected from each new monitoring well location. All soil and ground water samples underwent analysis for gasoline-range TPH, diesel- and oil-range TPHs, TAL metals including lead,

5. REC Outcomes and TBA Summary

VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs. Soil and ground water sample results did not exceed MTCA Method A cleanup levels, with the exception of benzo(a)pyrene in the soil sample collected from 0 to 4 feet bgs from MW8 and arsenic in the ground water sample collected from MW9. Resampling of well MW9 for total and dissolved arsenic confirmed the presence of arsenic above the regulatory standard. Since subsurface soil samples from this well did not contain elevated concentrations of arsenic, Asarco slag material was not encountered in this borehole, and upgradient ground water also did not contain elevated concentrations of arsenic, the source of this contamination could not be determined.

At present, the City of Tacoma does not allow the placement of new wells for drinking water purposes within the city limits. For this reason, and because the observed arsenic ground water contamination is isolated to the northeast corner of the site with no apparent onsite source, further environmental assessment of this REC is not recommended at this time. However, as suggested by Ecology during a November 2011 stakeholder meeting, it is recommended that environmental covenants be placed on the title to this parcel of land to prevent development of ground water at this location in the future unless further assessment and cleanup is conducted.

5.1.7 Gasoline-Contaminated Soil on the Northeast Corner of the Site (i.e., 2112 S. Jefferson Avenue)

During an earlier investigation, gasoline-range TPHs were detected above the MTCA Method A cleanup level in a single shallow soil sample collected from 18 inches bgs in a boring placed on the northeast corner of the site (near former boring SB9) at a location beyond the boundaries the UST and hoist removal excavations conducted by Nowicki. This boring was drilled using a Geoprobe™ direct-push drill rig, and encountered refusal at 18 inches bgs. Ecology had recommended additional sampling of shallow soil at this location since this area had not been the subject of a removal.

During the TBA, three test pits (Test Pits 6, 7, and 8) were excavated in this area. An asphalt pad underlain with heavy plastic sheeting, with concrete rubble beneath the sheeting, was encountered in Test Pit 6. This test pit was in close proximity to SB9 and it is suspected that the asphalt and rubble encountered here may have been the source of refusal during drilling of SB9.

Soil from Test Pit 6 had a petroleum odor and a PID reading of 13 ppm; no such odor was detected during excavation of Test Pits 7 and 8. One soil sample was collected from the Test Pit 6 soil stockpile and one water sample was collected from the test pit itself for analysis of gasoline-range TPHs, diesel- and oil-range TPHs, TAL metals including lead, VOCs including chlorinated solvents and fuel additives, SVOCs including cPAHs, and PCBs. The soil sample results did not exceed MTCA Method A cleanup levels. With the exception of arsenic and lead concentrations and the TEC BaP value in the turbid water from Test Pit 6, no other results exceeded MTCA Method A cleanup levels in the water sample.

5. REC Outcomes and TBA Summary

MW9 was drilled east and downgradient of SB9. Three subsurface soil samples (from 0 to 4 feet bgs, 4 to 8 feet bgs, and 8 to 12 feet bgs) and one ground water sample were collected from this borehole and analyzed for the same analytical suite as the Test Pit 6 samples. With the exception of arsenic in ground water from MW9, no other results exceeded MTCA Method A cleanup levels in these samples.

Based on these results and the assumption that an environmental covenant to prevent ground water use will be put into place, further assessment of this REC does not appear necessary.

5.1.8 Potential Releases of PCBs from Hydraulic Hoists

Hydraulic hoists were encountered within the businesses at 2112 and 2120 S. Jefferson Avenue. The hoist at 2112 S. Jefferson Avenue is known to have been removed. The fate of the hoist at 2120 S. Jefferson Avenue is not known. It appears that neither hoist was sampled for PCBs. In addition, the former gasoline station at 2105 Tacoma Avenue S. has been described as also having once been an automobile service station and, as such, may have contained a hydraulic lift. Since possible PCB contamination at these lifts remained an outstanding concern, it was considered a potential REC.

Sampling and analyses of ground water from each of these parcels during the TBA did not reveal the presence of PCBs; nor were PCBs detected in subsurface soil samples collected from 2112 and 2120 S. Jefferson Ave. Based on this data, it appears that a release of PCBs has not occurred at these locations. Further assessment of this REC does not appear necessary.

5.2 TBA Summary

In general, the eight RECs investigated as a component of this TBA were found not to be associated with actual environmental contamination. Though not included as a REC for this TBA, shallow ground water near the northeast corner of the site (i.e., former property address 2102 S. Jefferson Avenue) was found to contain arsenic above the MTCA Method A cleanup level. Due to the presence of this contamination and the lack of a known arsenic source at the site, it is recommended that environmental covenants be placed on the title to this parcel to prevent development of ground water unless further assessment and cleanup take place.

6

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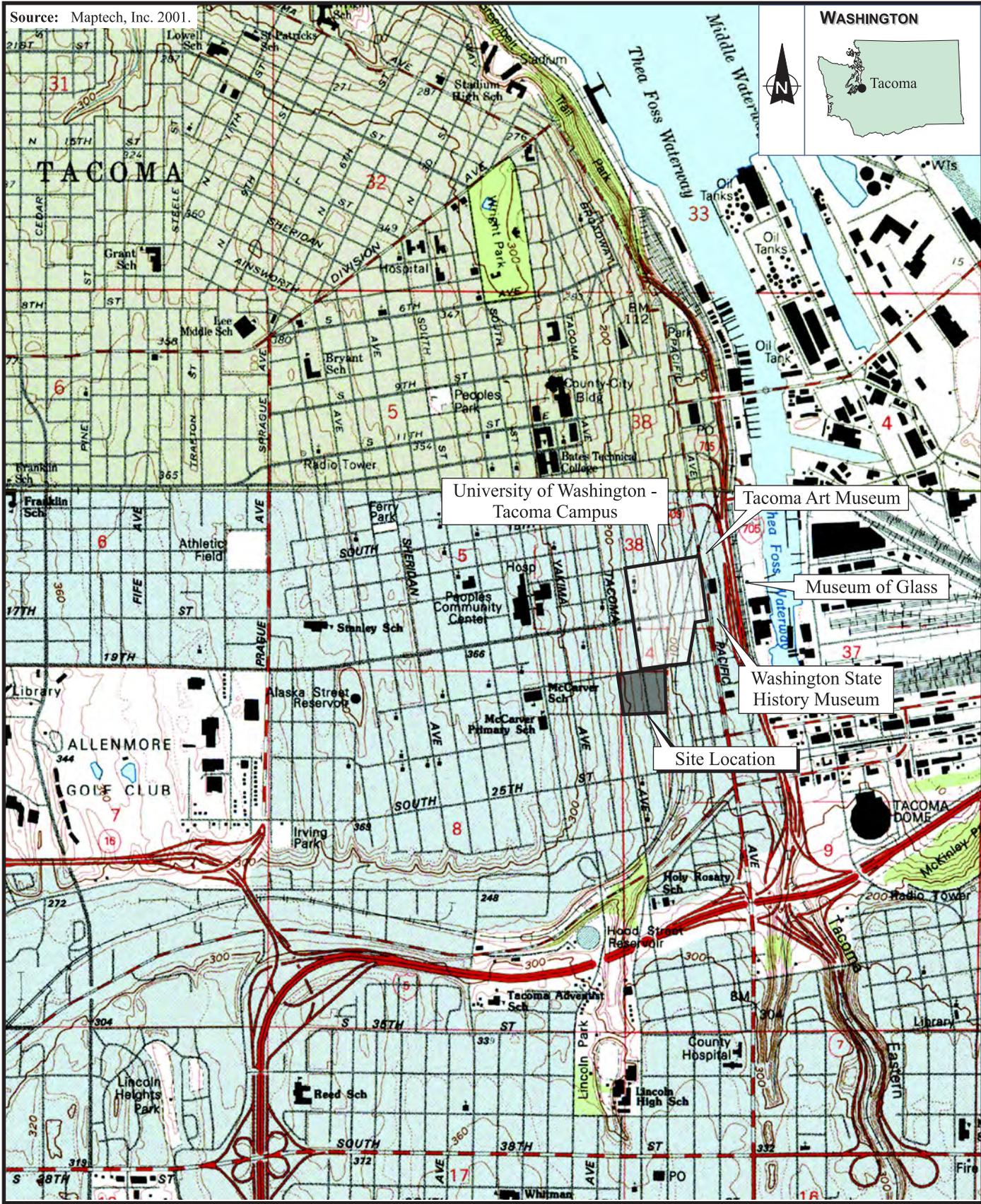
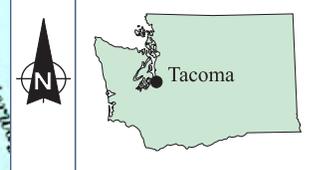
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Figures

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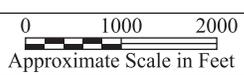
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WASHINGTON



JEFFERSON AVENUE SITE
Tacoma, Washington

Figure 2-1
SITE VICINITY MAP



Date:
12-3-12

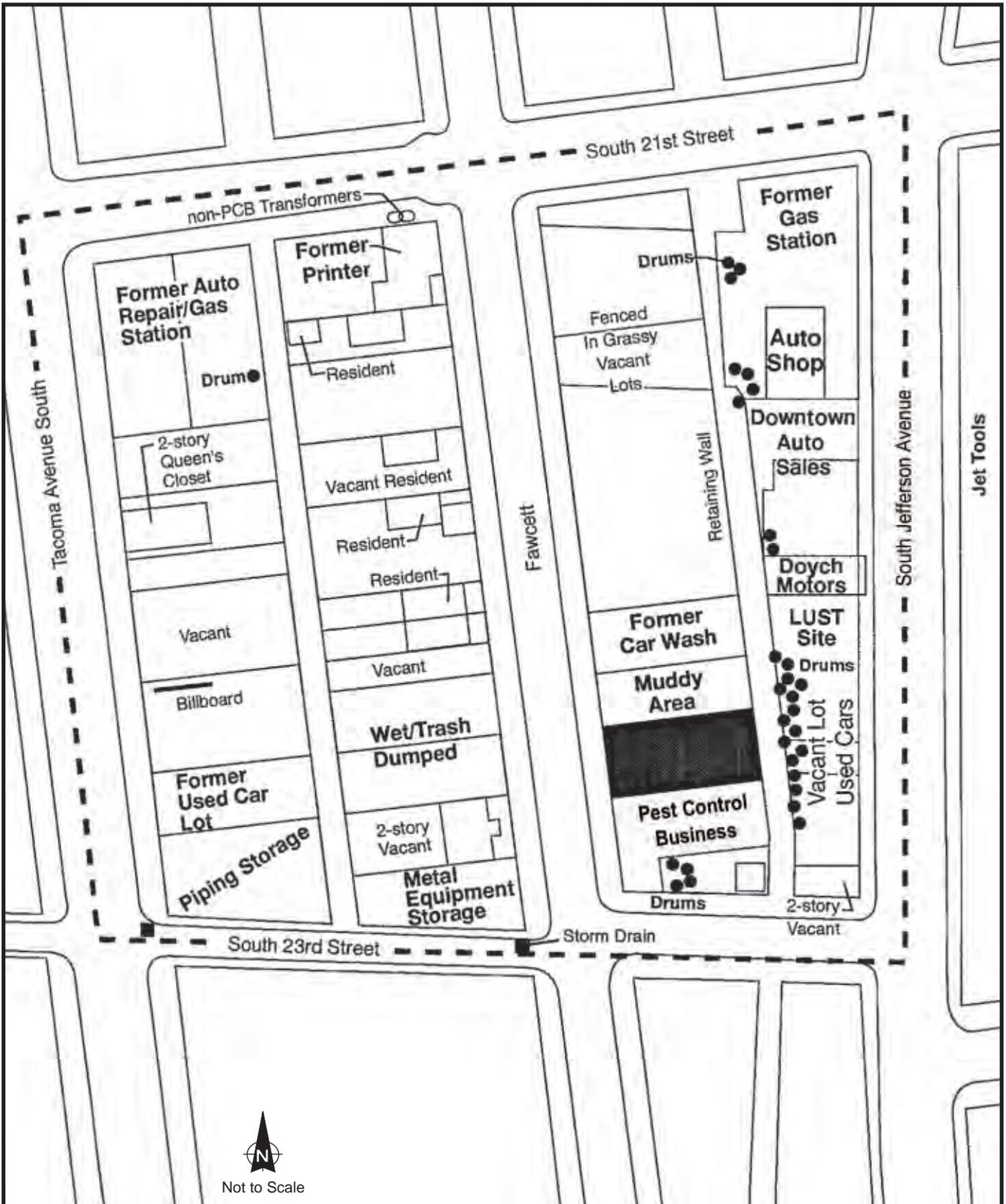
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Source: Google Earth Pro, 2012.



 <p>ecology and environment, inc. Global Specialists in the Environment Seattle, Washington</p>	<p>JEFFERSON AVENUE SITE Tacoma, Washington</p>		<p>Figure 2-2 SITE MAP</p>		
	<p>0 66 132 Approximate Scale in Feet</p>		Date: 12/3/12	Drawn by: AES	10:START-3\12010013\fig 2-2



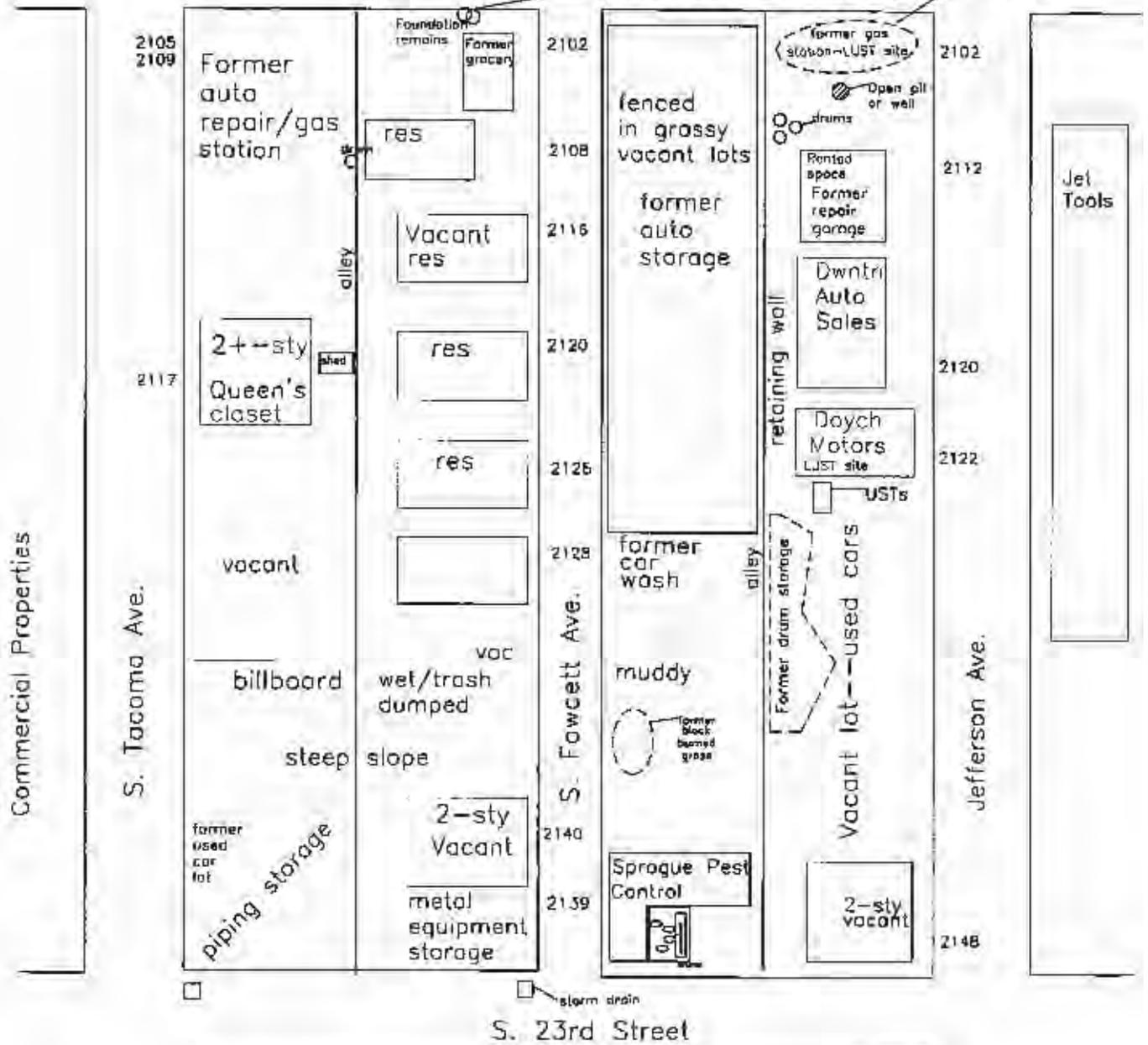
 ecology and environment, inc. Global Specialists in the Environment Seattle, Washington	JEFFERSON AVENUE SITE Tacoma, Washington		Figure 2-3 1999 SEPA EIS SITE FEATURES	
	Source: City of Tacoma 1999.	Date: 12-3-12	Drawn by: AES	10:START-3\12010013\fig 2-3

Commercial and Residential Properties

S. 21st Street

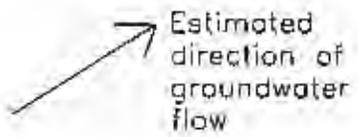
Non-PCB transformers

Mounded soil



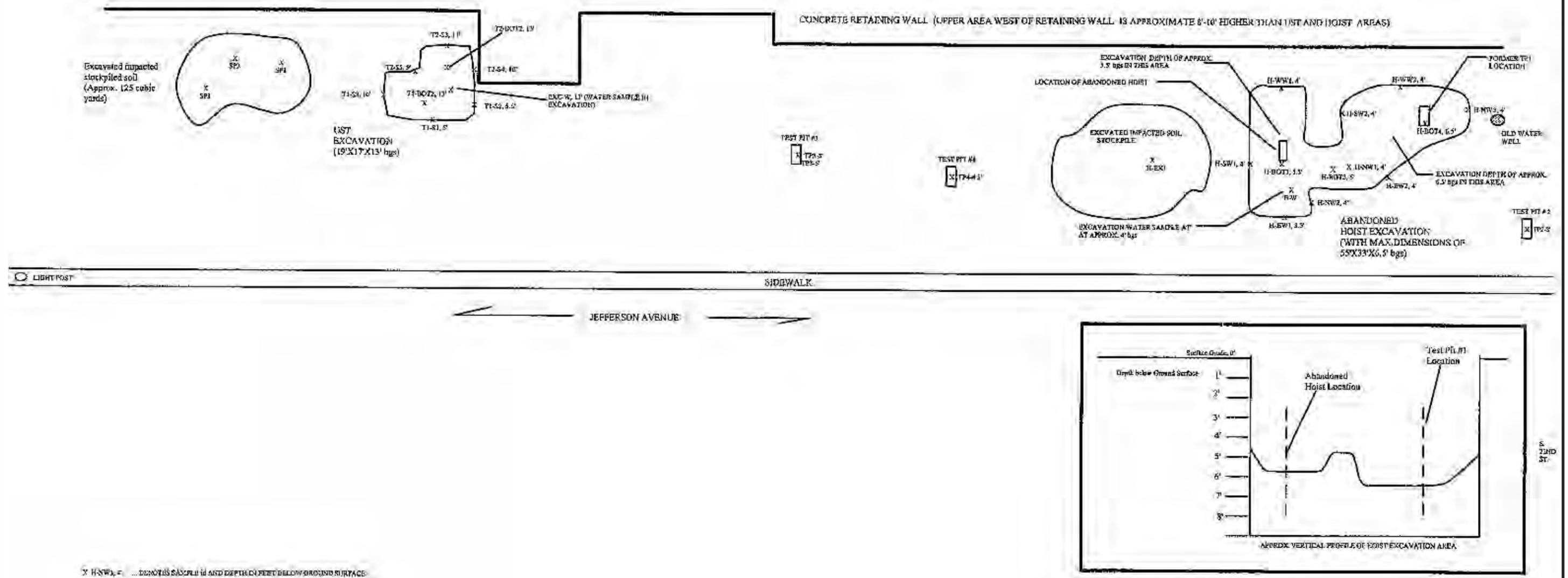
S. 23rd Street

Commercial Properties

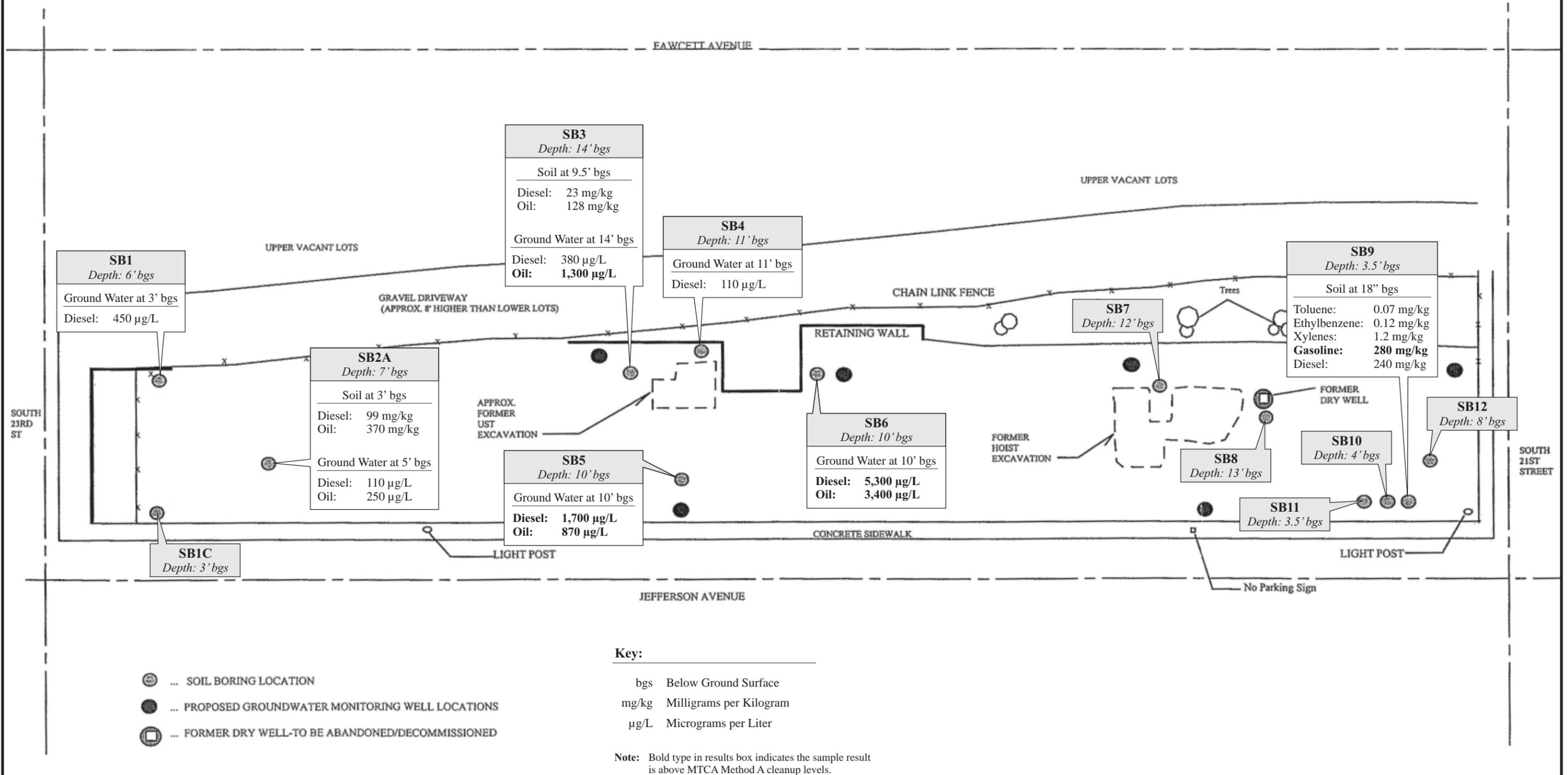


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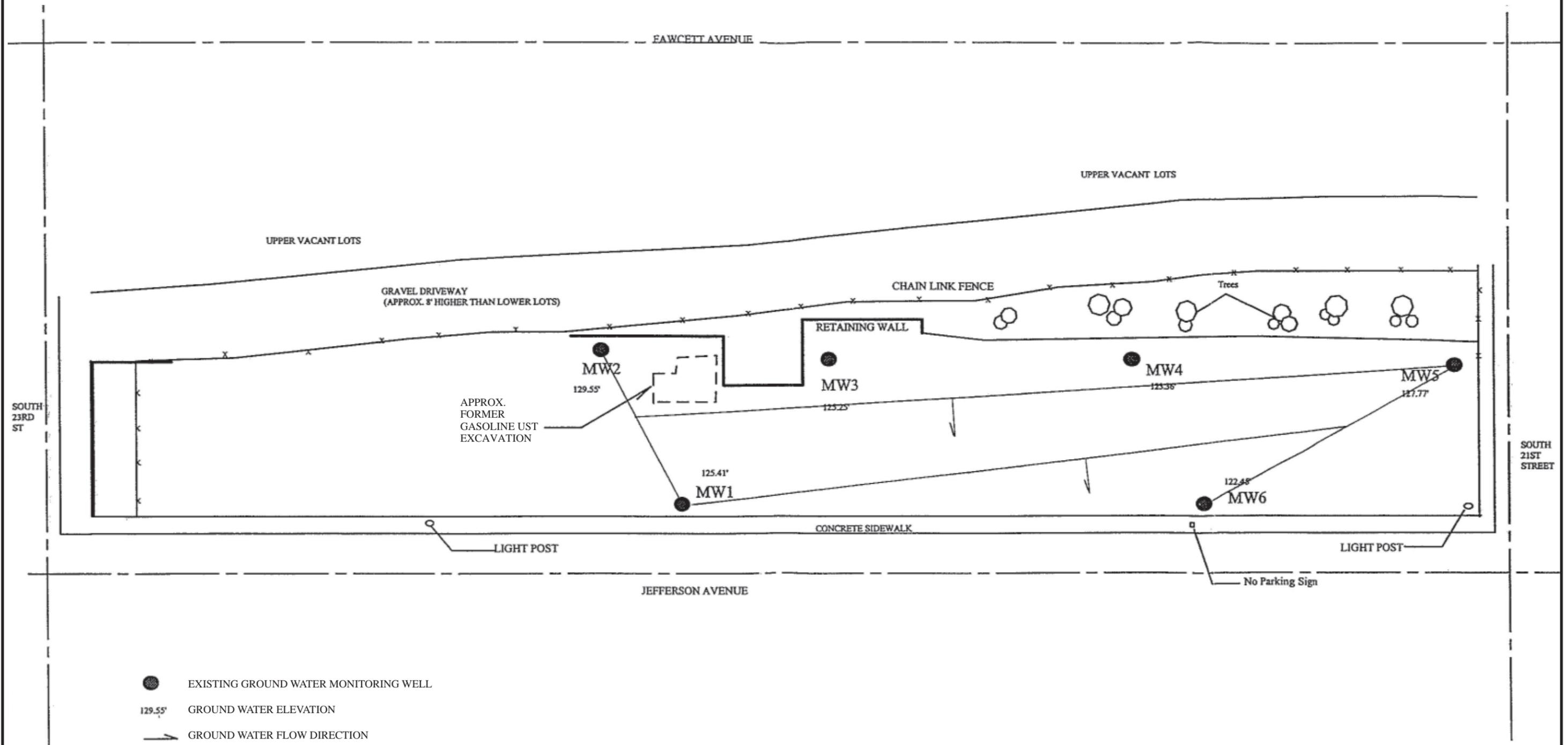
Source: Nowicki & Associates, Inc. 2002.



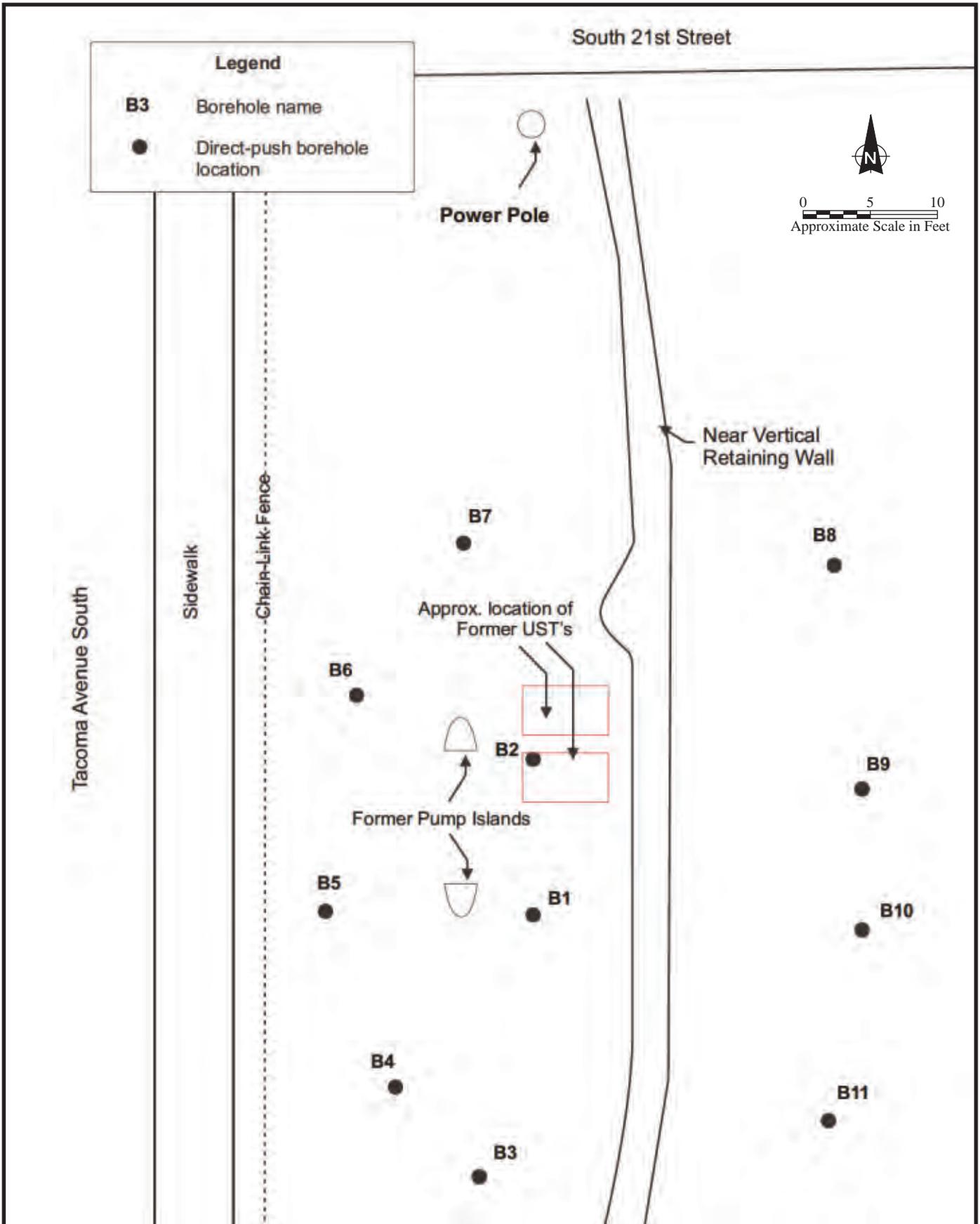
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 Global Specialists in the Environment
 Seattle, Washington

JEFFERSON AVENUE SITE
 Tacoma, Washington

Source: Robinson Noble Inc., 2012.

Figure 2-8

2012 PHASE II BOREHOLE INVESTIGATION

Date:
 12-3-12

Drawn by:
 AES

10:START-3\12010013\fig 2-8

Source: Google Earth Pro, 2012.



Key:

- ⊕ Existing Ground Water Monitoring Well
- ⊗ New Ground Water Monitoring Well
- ▲ Former Soil Boring
- TBA Soil Boring
- ▭ Test Pit

 <p>ecology and environment, inc. Global Specialists in the Environment Seattle, Washington</p>	<p>JEFFERSON AVENUE SITE Tacoma, Washington</p>		<p>Figure 4-1 SAMPLE LOCATION MAP</p>		
	<p>0 66 132 Approximate Scale in Feet</p>		Date: 12/6/12	Drawn by: AES	10:START-3\12010013\fig 4-1

Tables

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Table 2-1 Former Property Owners

Street Address	Parcel Number	Previous Owner
2132 S. Jefferson Ave.	202109-002-0 Parcel A 202109-003-1 Portion Parcel A 202108-001-1 Parcels C, D, E, G & Others	Derald E. & Margaret Martin PO Box 33 Fox Island, WA 98333
2112 S. Jefferson Ave.	202109-011-1 Parcel B	Blaine K. & Catherine B. Johnson 5316 N. Commercial St. Ruston, WA 98407
414 S. 21st St. 2107 S. Fawcett Ave.	202109-001-1 Parcel F 032009-200-0 Parcel H	Warren D. & Phyllis Foster 2209 Pacific Ave. Tacoma, WA 98402
2140 S. Jefferson Ave. 2148 S. Jefferson Ave.	202109-005-0 Lot 11 of Parcel L 202109-006-0 Lot 12 of Parcel L	Gary & Tillie Jensen 1108 Center St. Tacoma, WA 98402
2131 & 2139 S. Fawcett Ave.	202109-007-0 Lots 16 & 17 of Parcel J 202109-008-0 Lot 18 of Parcel J 202109-009-0 Lot 19 of Parcel J 202109-010-0 (Lot 20 of Parcel K)	Westroad Investments LLC (Larry Treleven) PO Box 2222 Tacoma, WA 98401
2102 S. Fawcett	202110-001-1 (Parcel L)	Chryse J. Karanzas 3521 Grandview Dr. W. Tacoma, WA 98466
2108 S. Fawcett	202110-004-0 (Parcel M)	Glenn P. Holman 2337 S. Grant Ave. Tacoma, WA 98405
2110 S. Fawcett	202110-005-0 (Parcel N)	David E. Olson, Susanne C. Olson and Nancy Olson-Bert 3609 Rancho Santa Fe St. Bakersfield, CA 93311
2116 S. Fawcett	202110-006-0 (Parcel O)	Elmo Payne
2525 Martin Luther King Jr. Way	202110-007-0 Parcel P 202110-008-0 Parcel Q	Richard & Clarene Tossey 2515 Martin Luther King Jr. Way Tacoma, WA 98405
2140 S. Fawcett S. 23rd & S. Fawcett NW Corner	202110-013-0 (Parcel U) 202110-014-0 (Parcel V)	Christa R. Troger (Gerhard Troger, Father) 1722 Tacoma Ave. S. Tacoma, WA 98402
S. 21st & Tacoma Ave. S. 2111 Tacoma Ave. S. 2117 Tacoma Ave. S. off of S. 23rd & S. Fawcett	202111-001-0 (East 65 ft. of Lots 1 to 15, Parcel W) 202111-003-0 (Lots 6 & 7, Parcel W) 202111-004-0 (Lots 8 & 9, Parcel Y) 202111-005-0 (Lots 10, Parcel Y) 202110-009-0 R	Beverly Long
off of S. 23rd & S. Fawcett	202110-012-0 Parcel T	Eugenia Fairbanks
2130 S. Fawcett 2132-2134 S. Fawcett	202110-010-0 (Lot 14, Parcel S) 202110-011-0 (Lots 15 & 16, Parcel S)	Helen R. Pilcher (John Pilcher, Son) 10404 139th St. Ct. E. Puyallup, WA 98374
2105 Tacoma Ave. S.	202111-002-0 (Parcel X)	H.W. Campbell Company (Tom or Bev Campbell)
Between S. 21st & S. 23 on S. Tacoma Ave.	202111-006-1 (Parcel Z)	Leo Jae Kim, Yun Sup Kim and Chang Ja Kim
2129 Tacoma Ave. S.	202111-009-1 (Parcel A-1)	Judge James P. Healy
S. 23rd & Tacoma Ave. S.	202111-012-0 (Lots 17 & 18, Parcel A-2)	Ting Ling Yeh and Hrushi Yeh
S. 23rd & Tacoma Ave. S.	202111-013-0 (Lots 19 to 22, Parcel A-2)	Ting Ling Yeh and Hrushi Yeh

Source: Clayton 1999.

Table 4-1 Available MTCA Method A Regulatory Standards

Analyte Name	MTCA Method A Soil Cleanup Levels (Unrestricted Land Use) (mg/kg)	MTCA Method A Ground Water Cleanup Levels (µg/L)
Target Analyte List Metals		
Arsenic	20	5
Cadmium	2	5
Chromium	--	50
Chromium III	2,000	--
Lead and Compounds	250	15
Mercury	2	2
Total Petroleum Hydrocarbons		
Gasoline Range Organics	100 ^a	1000 ^b
Diesel range Organics	2,000	500
Heavy Oils	2,000	500
Mineral Oils	4,000	500
Volatile Organic Compounds		
1,1,1-Trichloroethane	2	200
1,2-Dichloroethane	--	5
Benzene	0.03	5
Ethylbenzene	6	700
Xylenes	9	1000
Methyl tert-butyl ether	0.1	20
Methylene chloride	0.02	5
Tetrachloroethylene	0.05	5
Toluene	7	1000
Trichloroethylene	0.03	5
Vinyl chloride	--	0.2
Semi-Volatile Organic Compounds		
Benzo(a)pyrene	0.1 ^c	0.1 ^c
Naphthalene	5 ^d	160 ^d
Carinogenic PAHs	See benzo(a)pyrene ^c	See benzo(a)pyrene ^c
Other Analytes		
DDT	3	0.3
Lindane	0.01	0.2
PCB Mixtures	1 ^e	0.1 ^e

a - Gasoline mixtures without benzene and the total ethyl benzene, toluene, and xylene are less than 1% of the gasoline mixture. For all other gasoline mixtures, a cleanup level of 30 mg/kg applies.

b - Benzene not present in ground water. If benzene is present in ground water, a cleanup level of 800µg/L applies.

c - If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

d - This is a total value for naphthalene, 1-methyl naphthalene, and 2-methyl naphthalene.

e - This is a total value for all PCBs.

Key:

-- = Not available

MTCA = Model Toxics Control Act (November 2007)

mg/kg = milligrams per kilogram

PAHs = Polycyclic aromatic hydrocarbons

PCBs = Polychlorinated biphenyls

µg/L = microgram per liter

Table 4-2 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Soil Samples

EPA Sample ID CLP Sample ID Station Location Description Sample Depth (feet)	12214531 JRWQ2 MW07SB04 0-4			12214532 JRWQ3 MW07SB08 4-8			12214533 JRWQ4 MW07SB12 8-12		
	Lab Result (µg/kg)	TEF	BaP TEC	Lab Result (µg/kg)	TEF	BaP TEC	Lab Result (µg/kg)	TEF	BaP TEC
Benzo(a)pyrene	2.3 JQ	1	2.3	36 U	1	18	3.5 U	1	1.75
Benzo(a)anthracene	22 JQ	0.1	2.2	36 U	0.1	1.8	3.5 U	0.1	0.175
Benzo(b)fluoranthene	27 JQ	0.1	2.7	36 U	0.1	1.8	3.5 U	0.1	0.175
Benzo(k)fluoranthene	20 JQ	0.1	2	36 U	0.1	1.8	3.5 U	0.1	0.175
Chrysene	35 JQ	0.01	3.5	36 U	0.01	0.18	3.5 U	0.01	0.0175
Dibenzo(a,h)anthracene	27 JQ	0.1	2.7	36 U	0.1	1.8	3.5 U	0.1	0.175
Indeno(1,2,3-cd)pyrene	23 JQ	0.1	2.3	36 U	0.1	1.8	3.5 U	0.1	0.175
Total TEC in µg/kg			17.7			27.18			2.6425

Table 4-2 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Soil Samples

EPA Sample ID CLP Sample ID Station Location Description Sample Depth (feet)	12214535 JRWQ6 MW08SB04 0-4			12214536 JRWQ7 MW08SB08 4-8			12214537 JRWQ8 MW08SB12 8-12		
	Lab Result (µg/kg)	TEF	BaP TEC	Lab Result (µg/kg)	TEF	BaP TEC	Lab Result (µg/kg)	TEF	BaP TEC
Benzo(a)pyrene	120	1	120	5.9	1	5.9	6.2	1	6.2
Benzo(a)anthracene	130	0.1	13	4.6	0.1	0.46	4.4	0.1	0.44
Benzo(b)fluoranthene	110	0.1	11	7.7	0.1	0.77	8.9	0.1	0.89
Benzo(k)fluoranthene	84	0.1	8.4	3.3 JQ	0.1	0.33	3.8	0.1	0.38
Chrysene	130	0.01	1.3	7.7	0.01	0.077	8.9	0.01	0.0089
Dibenzo(a,h)anthracene	35 JQ	0.1	3.5	2.5 JQ	0.1	0.25	4.5	0.1	0.45
Indeno(1,2,3-cd)pyrene	90	0.1	9	5.4	0.1	0.54	9.2	0.1	0.92
Total TEC in µg/kg			166.2			8.327			9.2889

Table 4-2 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Soil Samples

Station Location Description Sample Depth (feet)	EPA Sample ID	12214539			12214540			12214541		
	CLP Sample ID	JRWR0			JRWR1			JRWR2		
		MW09SB04			MW09SB08			MW09SB12		
		0-4			4-8			8-12		
		Lab Result			Lab Result			Lab Result		
		(µg/kg)	TEF	BaP TEC	(µg/kg)	TEF	BaP TEC	(µg/kg)	TEF	BaP TEC
Benzo(a)pyrene		3.6 U	1	1.8	8.3	1	8.3	3.5 U	1	1.8
Benzo(a)anthracene		4.8	0.1	0.48	8.6	0.1	0.86	3.5 U	0.1	0.18
Benzo(b)fluoranthene		5.2	0.1	0.52	11	0.1	1.1	3.5 U	0.1	0.18
Benzo(k)fluoranthene		3.1 JQ	0.1	0.31	5.5	0.1	0.5	3.5 U	0.1	0.18
Chrysene		3.3 JQ	0.01	0.033	4.8 J	0.01	0.048	3.5 U	0.01	0.018
Dibenzo(a,h)anthracene		3.6 U	0.1	0.18	3.7	0.1	0.37	3.5 U	0.1	0.18
Indeno(1,2,3-cd)pyrene		3.6 U	0.1	0.18	8.5	0.1	0.85	3.5 U	0.1	0.18
Total TEC in µg/kg				3.503			12.028			2.718

Table 4-2 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Soil Samples

EPA Sample ID CLP Sample ID Station Location Description Sample Depth (feet)	12214550 JRWS1 TE06SB 2			12214551 JRWS2 TE09SB04 4			12214552 JRWS3 TE09SB07 7		
	Lab Result (µg/kg)	TEF	BaP TEC	Lab Result (µg/kg)	TEF	BaP TEC	Lab Result (µg/kg)	TEF	BaP TEC
Benzo(a)pyrene	57	1	57	3.6 U	1	1.8	3.6 U	1	1.8
Benzo(a)anthracene	51	0.1	5.1	3.6	0.1	0.36	10	0.1	1
Benzo(b)fluoranthene	57	0.1	5.7	4.6	0.1	0.46	19	0.1	1.9
Benzo(k)fluoranthene	35	0.1	3.5	2.4 JQ	0.1	0.24	11	0.1	1.1
Chrysene	28 J	0.01	0.28	3.3 JQ	0.01	0.033	9.7 J	0.01	0.097
Dibenzo(a,h)anthracene	17	0.1	1.7	3.6 U	0.1	0.18	7	0.1	0.7
Indeno(1,2,3-cd)pyrene	45	0.1	4.5	8.4	0.1	0.84	20	0.1	2
Total TEC in µg/kg	77.78			3.913			8.597		

Key:

- BaP = Benzo(a)pyrene.
- CLP = Contract Laboratory Program.
- CRQL = Contract Required Quantitation Limit.
- EPA = United States Environmental Protection Agency.
- ID = Identification.
- J = The analyte was positively identified. The associated numerical value is an estimate.
- µg/kg = micrograms per kilogram.
- Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.
- TEF = Toxic Equivalency Factor.
- TEC = Toxicity Equivlant Concentrations.
- U = The analyte was not detected at or above the associated value.

Table 4-3 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Water Samples

EPA Sample ID CLP Sample ID Station Location Description	12214525 JRWP6 MW01GW			12214526 JRWP7 MW02GW			12214527 JRWP8 MW03GW		
	Lab Result (µg/L)	TEF	BaP TEC	Lab Result (µg/L)	TEF	BaP TEC	Lab Result (µg/L)	TEF	BaP TEC
Benzo(a)pyrene	0.1 U	1	0.05	0.1 U	1	0.05	0.1 U	1	0.05
Benzo(a)anthracene	0.1 UJ	0.1	0.005	0.1 UJ	0.1	0.005	0.1 UJ	0.1	0.005
Benzo(b)fluoranthene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Benzo(k)fluoranthene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Chrysene	0.1 U	0.01	0.0005	0.1 U	0.01	0.0005	0.1 U	0.01	0.0005
Dibenzo(a,h)anthracene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Indeno(1,2,3-cd)pyrene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Total TEC in µg/L			0.0755			0.0755			0.0755

Table 4-3 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Water Samples

Station Location Description	EPA Sample ID	12214528			12214529			12214530		
	CLP Sample ID	JRWP9			JRWQ0			JRWQ1		
		MW04GW			MW05GW			MW06GW		
	Lab Result	TEF	BaP TEC	Lab Result	TEF	BaP TEC	Lab Result	TEF	BaP TEC	
	(µg/L)			(µg/L)			(µg/L)			
Benzo(a)pyrene	0.1 U	1	0.05	0.1 U	1	0.05	0.1 U	1	0.05	
Benzo(a)anthracene	0.095 JQ	0.1	0.00475	0.1 UJ	0.1	0.005	0.1 UJ	0.1	0.005	
Benzo(b)fluoranthene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005	
Benzo(k)fluoranthene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005	
Chrysene	0.069 JQ	0.01	0.000345	0.1 U	0.01	0.0005	0.1 U	0.01	0.0005	
Dibenzo(a,h)anthracene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005	
Indeno(1,2,3-cd)pyrene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005	
Total TEC in µg/L			0.075095			0.0755			0.0755	

Table 4-3 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Water Samples

EPA Sample ID CLP Sample ID Station Location Description	12214534 JRWQ5 MW07GW			12214538 JRWQ9 MW08GW			12214542 JRWR3 MW09GW		
	Lab Result (µg/L)	TEF	BaP TEC	Lab Result (µg/L)	TEF	BaP TEC	Lab Result (µg/L)	TEF	BaP TEC
Benzo(a)pyrene	0.1 U	1	0.05	0.1 U	1	0.05	0.1 U	1	0.05
Benzo(a)anthracene	0.1 UJ	0.1	0.005	0.1 UJ	0.1	0.005	0.1 UJ	0.1	0.005
Benzo(b)fluoranthene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Benzo(k)fluoranthene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Chrysene	0.1 U	0.01	0.0005	0.1 U	0.01	0.0005	0.1 U	0.01	0.0005
Dibenzo(a,h)anthracene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Indeno(1,2,3-cd)pyrene	0.1 U	0.1	0.005	0.1 U	0.1	0.005	0.1 U	0.1	0.005
Total TEC in µg/L			0.0755			0.0755			0.0755

Table 4-3 Calculations of Benzo(a)pyrene Toxicity Equivalent Concentrations for Water Samples

EPA Sample ID CLP Sample ID Station Location Description	12274101 JRWT7 MW10GW			12214554 JRWT1 TE06GW		
	Lab Result (µg/L)	TEF	BaP TEC	Lab Result (µg/L)	TEF	BaP TEC
Benzo(a)pyrene	0.1 U	1	0.05	0.1 U	1	0.05
Benzo(a)anthracene	0.1 U	0.1	0.005	0.2	0.1	0.02
Benzo(b)fluoranthene	0.13 U	0.1	0.0065	0.23	0.1	0.023
Benzo(k)fluoranthene	0.1 U	0.1	0.005	0.13	0.1	0.013
Chrysene	0.1 U	0.01	0.0005	0.12 J	0.01	0.0012
Dibenzo(a,h)anthracene	0.1 U	0.1	0.005	0.064 JQ	0.1	0.0064
Indeno(1,2,3-cd)pyrene	0.1 U	0.1	0.005	0.16	0.1	0.016
Total TEC in µg/L			0.077			0.1296

Key:

BaP = Benzo(a)pyrene.

CLP = Contract Laboratory Program.

CRQL = Contract Required Quantitation Limit.

EPA = United States Environmental Protection Agency.

ID = Identification.

J = The analyte was positively identified. The associated numerical value is an estimate.

µg/L = micrograms per liter.

Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.

TEF = Toxic Equivalency Factor.

TEC = Toxicity Equivalent Concentrations.

U = The analyte was not detected at or above the associated value.

Table 4-4 Sample Collection and Analysis Summary

EPA Sample Number	Station Number	CLP Inorganic Number	CLP Organic Number	Matrix	Depth (feet bgs)	Date	Time	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Gasoline-Range TPH	Diesel, Residual, & Oil-Range TPH	Description
12214555	ID01WT	MJRWS6	JRWS6	WW	NA	5/22/2012	2:10 PM	X	X	X	X	X	X	X	IDW sample of decontamination water generated when cleaning Geoprobe rods and also purge water from MW1 through MW6.
12214556	ID02WT	NA	JRWS7	WW	NA	5/24/2012	4:40 PM	X					X	X	IDW sample of purge water from MW7.
12214562	ID03WT	NA	JRWT3	WW	NA	5/24/2012	4:50 PM	X			X		X	X	IDW sample of purge water from MW8.
12214563	ID04WT	NA	JRWT4	WW	NA	5/24/2012	5:00 PM	X			X		X	X	IDW sample of purge water from MW9.
12214564	ID05WT	NA	JRWT5	WW	NA	5/25/2012	12:18 PM	X			X		X	X	IDW sample of purge water from MW10.
12214565	ID06WT	MJRWT6	JRWT6	WW	NA	5/25/2012	10:15 AM	X			X	X	X	X	IDW sample of decontamination water generated when cleaning split spoon samplers used to collect soil from MW7, MW8, MW9, and MW10.
12214500	JA01SB04	MJRWM1	JRWM1	Soil	0-4	5/21/2012	8:30 AM	X				X			Boring JA01. See borehole log for sample matrix description (Appendix D).
12214501	JA01SB08	MJRWM2	JRWM2	Soil	4-8	5/21/2012	9:00 AM	X				X			Boring JA01. See borehole log for sample matrix description (Appendix D).
12214502	JA01SB12	MJRWM3	JRWM3	Soil	8-12	5/21/2012	9:30 AM	X				X			Boring JA01. See borehole log for sample matrix description (Appendix D).
12214505	JA02SB04	MJRWM6	JRWM6	Soil	0-4	5/21/2012	11:02 AM	X				X			Boring JA02. See borehole log for sample matrix description (Appendix D).
12214506	JA02SB08	MJRWM7	JRWM7	Soil	4-8	5/21/2012	11:29 AM	X				X			Boring JA02. See borehole log for sample matrix description (Appendix D).
12214507	JA02SB12	MJRWM8	JRWM8	Soil	8-12	5/21/2012	11:53 AM	X				X			Boring JA02. See borehole log for sample matrix description (Appendix D).

Table 4-4 Sample Collection and Analysis Summary

EPA Sample Number	Station Number	CLP Inorganic Number	CLP Organic Number	Matrix	Depth (feet bgs)	Date	Time	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Gasoline-Range TPH	Diesel, Residual, & Oil-Range TPH	Description
12214510	JA03SB04	NA	JRWN1	Soil	0-4	5/21/2012	2:55 PM			X					Boring JA03. See borehole log for sample matrix description (Appendix D).
12214511	JA03SB08	NA	JRWN2	Soil	4-8	5/21/2012	3:10 PM			X					Boring JA03. See borehole log for sample matrix description (Appendix D).
12214512	JA03SB12	NA	JRWN3	Soil	8-12	5/21/2012	3:30 PM			X					Boring JA03. See borehole log for sample matrix description (Appendix D).
12214515	JA04SB04	NA	JRWN6	Soil	0-4	5/21/2012	3:45 PM			X					Boring JA04. See borehole log for sample matrix description (Appendix D).
12214516	JA04SB08	NA	JRWN7	Soil	4-8	5/21/2012	4:05 PM			X					Boring JA04. See borehole log for sample matrix description (Appendix D).
12214517	JA04SB12	NA	JRWN8	Soil	8-12	5/21/2012	4:25 PM			X					Boring JA04. See borehole log for sample matrix description (Appendix D).
12214520	JA05SB04	NA	JRWP1	Soil	0-4	5/21/2012	4:50 PM			X					Boring JA05. See borehole log for sample matrix description (Appendix D).
12214521	JA05SB08	NA	JRWP2	Soil	4-8	5/21/2012	5:10 PM			X					Boring JA05. See borehole log for sample matrix description (Appendix D).
12214522	JA05SB12	NA	JRWP3	Soil	8-12	5/21/2012	5:30 PM			X					Boring JA05. See borehole log for sample matrix description (Appendix D).
12214525	MW01GW	MJRWP6	JRWP6	GW	13	5/22/2012	3:30 PM	X	X		X	X	X	X	Field Sample
12214526	MW02GW	MJRWP7	JRWP7	GW	13	5/22/2012	4:25 PM	X	X		X	X	X	X	Field Sample
12214527	MW03GW	MJRWP8	JRWP8	GW	13	5/22/2012	3:45 PM	X	X		X	X	X	X	Field Sample
12214528	MW04GW	MJRWP9	JRWP9	GW	13	5/22/2012	3:55 PM	X	X		X	X	X	X	Field Sample
12214529	MW05GW	MJRWQ0	JRWQ0	GW	13	5/22/2012	4:05 PM	X	X		X	X	X	X	Field Sample
12214530	MW06GW	MJRWQ1	JRWQ1	GW	13	5/22/2012	4:14 PM	X	X		X	X	X	X	Field Sample

Table 4-4 Sample Collection and Analysis Summary

EPA Sample Number	Station Number	CLP Inorganic Number	CLP Organic Number	Matrix	Depth (feet bgs)	Date	Time	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Gasoline-Range TPH	Diesel, Residual, & Oil-Range TPH	Description
12214534	MW07GW	MJRWQ5	JRWQ5	GW	23	5/24/2012	6:14 PM	X	X		X	X	X	X	Monitoring Well MW7. Clear, no odor. Laboratory QC sample.
12214531	MW07SB04	MJRWQ2	JRWQ2	Soil	0-4	5/23/2012	10:15 AM	X	X		X	X	X	X	Monitoring Well MW7. See monitoring well log for sample matrix description (Appendix D). Laboratory QC sample.
12214532	MW07SB08	MJRWQ3	JRWQ3	Soil	4-8	5/23/2012	10:25 AM	X	X		X	X	X	X	Monitoring Well MW7. See monitoring well log for sample matrix description (Appendix D).
12214533	MW07SB12	MJRWQ4	JRWQ4	Soil	8-12	5/23/2012	10:30 AM	X	X		X	X	X	X	Monitoring Well MW7. See monitoring well log for sample matrix description (Appendix D).
12214538	MW08GW	MJRWQ9	JRWQ9	GW	13	5/24/2012	6:58 PM	X	X		X	X	X	X	Monitoring Well MW8. Clear, no odor.
12214535	MW08SB04	MJRWQ6	JRWQ6	Soil	0-4	5/23/2012	2:14 PM	X	X		X	X	X	X	Monitoring Well MW8. See monitoring well log for sample matrix description (Appendix D). Laboratory QC sample.
12214536	MW08SB08	MJRWQ7	JRWQ7	Soil	4-8	5/23/2012	2:26 PM	X	X		X	X	X	X	Monitoring Well MW8. See monitoring well log for sample matrix description (Appendix D).
12214537	MW08SB12	MJRWQ8	JRWQ8	Soil	8-12	5/23/2012	2:45 PM	X	X		X	X	X	X	Monitoring Well MW8. See monitoring well log for sample matrix description (Appendix D).
12214542	MW09GW	MJRWR3	JRWR3	GW	13	5/25/2012	1:50 PM	X	X		X	X	X	X	Monitoring Well MW9. Clear, no odor.
12214539	MW09SB04	MJRWR0	JRWR0	Soil	0-4	5/24/2012	9:28 AM	X	X		X	X	X	X	Monitoring Well MW9. See monitoring well log for sample matrix description (Appendix D).
12214540	MW09SB08	MJRWR1	JRWR1	Soil	4-8	5/24/2012	9:42 AM	X	X		X	X	X	X	Monitoring Well MW9. See monitoring well log for sample matrix description (Appendix D).
12214541	MW09SB12	MJRWR2	JRWR2	Soil	8-12	5/24/2012	10:05 AM	X	X		X	X	X	X	Monitoring Well MW9. See monitoring well log for sample matrix description (Appendix D).
12274101	MW10GW	MJRWT7	JRWT7	GW	38	7/2/2012	12:40 PM	X	X		X	X	X	X	Monitoring Well MW10. Turbid, no odor. Laboratory QC sample.

Table 4-4 Sample Collection and Analysis Summary

EPA Sample Number	Station Number	CLP Inorganic Number	CLP Organic Number	Matrix	Depth (feet bgs)	Date	Time	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Gasoline-Range TPH	Diesel, Residual, & Oil-Range TPH	Description
12214557	RS01WT	MJRWS8	JRWS8	Water	NA	5/21/2012	2:00 PM	X		X		X			Rinsate of Geoprobe cutting shoe.
12214558	RS02WT	MJRWS9	JRWS9	Water	NA	5/24/2012	10:35 AM	X	X		X	X	X	X	Rinsate of spilt spoon sampler.
12274102	RS03WT	MJRWT8	JRWT8	Water	NA	7/2/2012	2:30 PM	X	X		X	X	X	X	Rinsate of Grundfos pump.
12214559	TB01WT	NA	JRWT0	Water	NA	5/21/2012	7:35 AM	X					X		Trip Blank
12214560	TB02WT	NA	JRWS5	Water	NA	5/22/2012	5:05 PM	X					X		Trip Blank
12214561	TB03WT	NA	JRWT2	Water	NA	5/24/2012	5:25 PM	X					X		Trip Blank
12274100	TB04WT	NA	JRWT9	Water	NA	7/2/2012	10:25 AM	X							Trip Blank
12214554	TE06GW	MJRWT1	JRWT1	GW	2	5/22/2012	11:45 AM	X	X		X	X	X	X	Water from Test Pit 6 (perched water above the water table). Turbid. No odor.
12214550	TE06SB	MJRWS1	JRWS1	Soil	2	5/22/2012	11:15 AM	X	X		X	X	X	X	Soil from Test Pit 6. Material has a petroleum odor with an FID reading of 13 ppm.
12214551	TE09SB04	MJRWS2	JRWS2	Soil	4	5/22/2012	2:45 PM	X	X		X	X	X	X	Soil from west end of Test Pit 9. Soil is wet, gray, till composed mainly of fine sand with some cobbles. Petroleum odor.
12214552	TE09SB07	MJRWS3	JRWS3	Soil	7	5/22/2012	3:00 PM	X	X		X	X	X	X	Soil from east end of Test Pit 9. Material consists of gray till composed mainly of fine sand with some cobbles. Petroleum odor.
12424300	MW09GWD	NA	NA	Water	NA	10/18/2012	11:50 AM					As only			Monitoring Well 9, dissolved arsenic aliquot. Clear, no odor.
12424301	MW09GWT	NA	NA	Water	NA	10/18/2012	11:52 AM					As only			Monitoring Well 9, total arsenic aliquot. Clear, no odor.

Key:

- As = Arsenic.
- bgs = Below ground surface.
- CLP = Contract laboratory program.
- EPA = Environmental Protection Agency.
- FID = Flame ionization detector.
- GW = Ground water.
- IDW = Investigation-derived waste.
- NA = Not applicable.
- ppm = parts per million.
- QC = quality control.
- TAL = Target Analyte List.
- TPH = Total petroleum hydrocarbons.
- WW = Waste water.

Table 4-5 Sample Coding

Digits	Description	Code	Example
1,2	Source Code	ID	Investigation-Derived Waste
		JA	Jefferson Avenue
		MW	Monitoring Well
		RS	Rinsate
		TB	Trip Blank
		TE	Test Pit Excavation
3,4	Consecutive Number	01	First number of source code
		GW	Ground Water
		SB	Subsurface Soil
		WT	Water
7,8	Consecutive Number	01	Lowest depth of sample matrix

Table 4-6 Summary of Regulatory Standard Exceedances in Soil

Analyte	Range of Detected Concentrations	Frequency of Detection	Frequency of Exceedance of Regulatory Standards	Regulatory Standard
Semivolatile Organic Compounds (µg/kg)				
Benzo(a)pyrene	5.9 - 120	5/12	1/12	100 ^a
BaP TEC	2.6425 – 166.2	12/12	1/12	100 ^a

Notes:

a – MTCA Method A Soil Cleanup Levels for Unrestricted Land Use.

Key:

BaP = Benzo(a)pyrene.
MTCA = Model Toxics Control Act.
TEC = Toxicity Equivalent Concentration.
µg/kg = micrograms per kilogram.

Table 4-7 Summary of Regulatory Standard Exceedances in Water

Analyte	Range of Detected Concentrations	Frequency of Detection	Frequency of Exceedance of Regulatory Standards	Regulatory Standard
TAL Metals ($\mu\text{g/L}$)				
Arsenic	24 – 48.3	2/11	2/11	5 ^a
Lead	812	1/11	1/11	15 ^a
Semivolatile Organic Compounds ($\mu\text{g/L}$)				
BaP TEC	0.0755 – 0.1296	1/11	1/11	0.1 ^a

Notes:

a – MTCA Method A Water Cleanup Levels for Unrestricted Land Use.

Key:

BaP = Benzo(a)pyrene.
MTCA = Model Toxics Control Act.
TEC = Toxicity Equivalent Concentration.
 $\mu\text{g/L}$ = micrograms per liter.

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Table 4-8 Soil Samples Analytical Results Summary

EPA Sample ID CLP Sample ID Station Number Sample Depth (feet) Location	Regulatory Standard (MTCA Method A)	12214500	12214501	12214502	12214505	12214506	12214507	12214510	12214511	12214512	12214515	12214516	12214517	12214520	12214521	12214522
		JRWM1 JA01SB04 0-4	JRWM2 JA01SB08 4-8	JRWM3 JA01SB12 8-12	JRWM6 JA02SB04 0-4	JRWM7 JA02SB08 4-8	JRWM8 JA02SB12 8-12	JRWN1 JA03SB04 0-4	JRWN2 JA03SB08 4-8	JRWN3 JA03SB12 8-12	JRWN6 JA04SB04 0-4	JRWN7 JA04SB08 4-8	JRWN8 JA04SB12 8-12	JRWP1 JA05SB04 0-4	JRWP2 JA05SB08 4-8	JRWP3 JA05SB12 8-12
Former Printer Business								Former Pest Control Business								
TAL Metals (mg/kg)																
Aluminum	NA	9190	10100	11400	10000	9850	9300	--	--	--	--	--	--	--	--	--
Arsenic	20	2.6	2.6	1.7	3.1	2.6	2.6	--	--	--	--	--	--	--	--	--
Barium	NA	42.4 J	62 J	51.6 J	41 J	39 J	44.4 J	--	--	--	--	--	--	--	--	--
Cadmium	2	0.57 UJ	0.55 UJ	0.55 U	0.55 U	0.54 U	0.55 U	--	--	--	--	--	--	--	--	--
Calcium	NA	4750 J	4700 J	6120 J	5580 J	5000 J	4950 J	--	--	--	--	--	--	--	--	--
Chromium	NA	26.3 J	27.7 J	25.8	28.8	22	24.4	--	--	--	--	--	--	--	--	--
Cobalt	NA	7.6 J	8.3 J	9 J	8.9 J	7.8 J	8.3 J	--	--	--	--	--	--	--	--	--
Copper	NA	11.2 J	13.4 J	13.5 J	11.1 J	11.7 J	12.4 J	--	--	--	--	--	--	--	--	--
Iron	NA	14300 J	15300 J	15700 J	14900 J	15000 J	15000 J	--	--	--	--	--	--	--	--	--
Lead	250	2.3 J	2.9 J	2	1.9	2.3	2	--	--	--	--	--	--	--	--	--
Magnesium	NA	4940 J	5270 J	4910 J	4930 J	4500 J	4120 J	--	--	--	--	--	--	--	--	--
Manganese	NA	291 J	238 J	210 J	261 J	235 J	437 J	--	--	--	--	--	--	--	--	--
Nickel	NA	40.2	39.2	34.5	44.2	31.8	27.8	--	--	--	--	--	--	--	--	--
Potassium	NA	683 J	859 J	707	664	706	633	--	--	--	--	--	--	--	--	--
Sodium	NA	568 U	554 U	554 UJ	552 UJ	542 UJ	551 UJ	--	--	--	--	--	--	--	--	--
Vanadium	NA	33.8	34.9	42.9	38.4	36.6	39.1	--	--	--	--	--	--	--	--	--
Zinc	NA	31	36.4	35	30.8	31.8	30.9	--	--	--	--	--	--	--	--	--
Total Petroleum Hydrocarbons (mg/kg)																
TPH-GC/Diesel Range Organics	2,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TPH-GC/Motor Oil Range Organics	2,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TPH-Gx Gasoline Range Organics	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg)																
alpha-Chlordane	NA	--	--	--	--	--	--	2	1.9 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	1.9 U
Methoxychlor	NA	--	--	--	--	--	--	20 U	19 U	220	20	49	51	20 U	19 U	19 U

Table 4-8 Soil Samples Analytical Results Summary

EPA Sample ID CLP Sample ID Station Number Sample Depth (feet) Location	Regulatory Standard (MTCA Method A)	12214531 JRWQ2 MW07SB04 0-4	12214532 JRWQ3 MW07SB08 4-8	12214533 JRWQ4 MW07SB12 8-12	12214535 JRWQ6 MW08SB04 0-4	12214536 JRWQ7 MW08SB08 4-8	12214537 JRWQ8 MW08SB12 8-12	12214539 JRWR0 MW09SB04 0-4	12214540 JRWR1 MW09SB08 4-8	12214541 JRWR2 MW09SB12 8-12	12214550 JRWS1 TE06SB 2	12214551 JRWS2 TE09SB04 4	12214552 JRWS3 TE09SB07 7
		Monitoring Well 7			Monitoring Well 8			Monitoring Well 9			Test Pit 6	Test Pit 9	
TAL Metals (mg/kg)													
Aluminum	NA	11700	11000	9500	9810	10100	8970	9420	10700	7700	10100	10400	10200
Arsenic	20	4.2	4.6	1.9	2.1	1.9	2.3	1.6	1.8	1.8	2.7	2.9	2.6
Barium	NA	50.3 J	48 J	50.7 J	87.1 J	45.3 J	36.1 J	47.1 J	47 J	26.7 J	61.8 J	48.1 J	49.3 J
Cadmium	2	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 U	0.57 U	0.55 UJ	0.55 UJ	0.53 UJ	0.54 UJ	0.57 U	0.046 J
Calcium	NA	7270 J	6370 J	16900 J	5080 J	5650 J	5310 J	5620 J	6310 J	4870 J	10300 J	6170 J	6900 J
Chromium	NA	26.7 J	28.8 J	27.2 J	23.5 J	24.9	24.9	22.6 J	28.8 J	19.5 J	20.6 J	30.4	27.1
Cobalt	NA	8.7 J	8.3 J	7.1 J	7.9 J	8.2 J	7 J	7.5 J	8 J	5.7 J	7.8 J	8.5 J	7.6 J
Copper	NA	15.2 J	16.2 J	12.7 J	13.1 J	11.7 J	10.7 J	11 J	12.7 J	8.4 J	24.1 J	12.9 J	14.1 J
Iron	NA	16100 J	17300 J	14700 J	15600 J	15600 J	14400 J	15300 J	16000 J	11500 J	15300 J	14900 J	14900 J
Lead	250	6.2 J	5.3 J	2.8 J	5.3 J	2.2	2.1	4 J	4.6 J	2 J	64.9 J	6.3	16.6
Magnesium	NA	4960 J	6130 J	6130 J	5260 J	5830 J	5020 J	5510 J	5950 J	4460 J	4860 J	5970 J	5030 J
Manganese	NA	322 J	363 J	324 J	645 J	274 J	273 J	353 J	307 J	225 J	292 J	268 J	272 J
Nickel	NA	33.6	37.3	31.6	34.5	32.8	35.8	35.8	33.5	28.7	31.4	46.5	33.5
Potassium	NA	881 J	799 J	895 J	844 J	923	572	671 J	852 J	534 UJ	673 J	767	722
Sodium	NA	536 U	542 U	541 U	541 U	541 UJ	569 UJ	545 U	545 U	534 U	597	568 UJ	558 UJ
Vanadium	NA	42.2	39	33.9	34.7	38.2	35.1	34	38.4	27.5	34.4	39.7	39.1
Zinc	NA	44.1	43.9	34.5	41.2	33.1	30.1	41.4	39.8	25.9	256	39.1	61.1
Total Petroleum Hydrocarbons (mg/kg)													
TPH-GC/Diesel Range Organics	2,000	8.2 U	8.4 U	8 U	8.4 U	8.3 U	8.6 U	8.5 U	8.6 U	8.4 U	8.5 U	8.5 U	8.6 U
TPH-GC/Motor Oil Range Organics	2,000	420 J	130	32	370	130	83	25	21 U	21 U	160	41	62
TPH-Gx Gasoline Range Organics	100	4.7 U	4.9 U	4.2 U	6.5 U	5.1 U	4.5 U	4.2 U	5.1 U	4.4 U	4.8 U	5 U	4.2
Pesticides (µg/kg)													
alpha-Chlordane	NA	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	NA	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-8 Soil Samples Analytical Results Summary

EPA Sample ID CLP Sample ID Station Number Sample Depth (feet) Location	Regulatory Standard (MTCA Method A)	12214500 JRWM1 JA01SB04 0-4	12214501 JRWM2 JA01SB08 4-8	12214502 JRWM3 JA01SB12 8-12	12214505 JRWM6 JA02SB04 0-4	12214506 JRWM7 JA02SB08 4-8	12214507 JRWM8 JA02SB12 8-12	12214510 JRWN1 JA03SB04 0-4	12214511 JRWN2 JA03SB08 4-8	12214512 JRWN3 JA03SB12 8-12	12214515 JRWN6 JA04SB04 0-4	12214516 JRWN7 JA04SB08 4-8	12214517 JRWN8 JA04SB12 8-12	12214520 JRWP1 JA05SB04 0-4	12214521 JRWP2 JA05SB08 4-8	12214522 JRWP3 JA05SB12 8-12
Former Printer Business								Former Pest Control Business								
Semivolatile Organic Compounds (µg/kg)																
Acenaphthene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	100 ^b	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	5000 ^c	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BaP TEC (from Table 4-6)	100 ^b	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-8 Soil Samples Analytical Results Summary

EPA Sample ID CLP Sample ID Station Number Sample Depth (feet) Location	Regulatory Standard (MTCA Method A)	12214531 JRWQ2 MW07SB04 0-4	12214532 JRWQ3 MW07SB08 4-8	12214533 JRWQ4 MW07SB12 8-12	12214535 JRWQ6 MW08SB04 0-4	12214536 JRWQ7 MW08SB08 4-8	12214537 JRWQ8 MW08SB12 8-12	12214539 JRWR0 MW09SB04 0-4	12214540 JRWR1 MW09SB08 4-8	12214541 JRWR2 MW09SB12 8-12	12214550 JRWS1 TE06SB 2	12214551 JRWS2 TE09SB04 4	12214552 JRWS3 TE09SB07 7
		Monitoring Well 7			Monitoring Well 8			Monitoring Well 9			Test Pit 6	Test Pit 9	
Semivolatile Organic Compounds (µg/kg)													
Acenaphthene	NA	35 U	36 U	3.5 U	20 JQ	3.5 U	3.7 U	3.6 U	3.6 U	3.5 U	52 JQ	6.8	4.1
Acenaphthylene	NA	35 U	36 U	3.5 U	64	3.5 U	3.7 U	3.6 U	3.6 U	3.5 U	9.6	3.6 U	3.6 U
Benzo(b)fluoranthene	NA	27 JQ	36 U	3.5 U	110	7.7	8.9	5.2	11	3.5 U	57	4.6	19
Benzo(g,h,i)perylene	NA	31 JQ	36 U	3.5 U	110	9.7	18	3.6 U	12	3.5 U	42	8.2	25
Benzo(k)fluoranthene	NA	20 JQ	36 U	3.5 U	84	3.3 JQ	3.8	3.1 JQ	5.5	3.5 U	35	2.4 JQ	11
Chrysene	NA	35 JQ	36 U	3.5 U	130	7.7	8.9	3.3 JQ	4.8 J	3.5 U	28 J	3.3 JQ	9.7 J
Dibenzo(a,h)anthracene	NA	27 JQ	36 U	3.5 U	35 JQ	2.5 JQ	4.5	3.6 U	3.7	3.5 U	17	3.6 U	7
Fluorene	NA	35 U	36 U	3.5 U	71	3.5 U	3.7 U	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.6 U
Phenanthrene	NA	38 J	36 U	3.5 U	330 JQ	5.3	5 J	3.5 JQ	4.8	3.1 JQ	70 J	3.6 JQ	9
Pyrene	NA	33 JQ	13 JQ	3.5 U	300	11	9.4	7.8	10	5	110	9.8	18
2-Methylnaphthalene	NA	35 U	36 U	3.5 U	35 U	3.5 U	3.7 U	3.6 U	3.6 U	3.5 U	12	3.6 U	9
Anthracene	NA	35 U	36 U	3.5 U	120	3.5 U	3.7 U	3.6 U	3.6 U	3.5 U	190 U	3.6 U	3.6 U
Benzo(a)anthracene	NA	22 JQ	36 U	3.5 U	130	4.6	4.4	4.8	8.6	3.5 U	51	3.6	10
Benzo(a)pyrene	100 ^b	2.3 JQ	36 U	3.5 U	<u>120</u>	5.9	6.2	3.6 U	8.3	3.5 U	57	3.6 U	3.6 U
Fluoranthene	NA	30 JQ	12 JQ	3.5 U	300	6	3.7 JQ	4	7.6	2.6 JQ	74	3.6 U	8.9
Indeno(1,2,3-cd)pyrene	NA	23 JQ	36 U	3.5 U	90	5.4	9.2	3.6 U	8.5	3.5 U	45	8.4	20
Naphthalene	5000 ^c	35 U	36 U	3.5 U	35 U	3.5 U	3.7 U	3.6 U	3.6 U	3.5 U	11	3.6 U	6.3
Pentachlorophenol	NA	71 U	64 JQ	5.1 JQ	9.5 JQ	7.1 U	7.5 U	R	4.6 JQ	R	70 JQ	9.9 J	8 J
BaP TEC (from Table 4-6)	100 ^b	17.7	27.18	2.6425	<u>166.2</u>	8.327	9.2889	3.503	12.028	2.718	77.78	3.913	8.597

Table 4-8 Soil Samples Analytical Results Summary

EPA Sample ID	Regulatory Standard (MTCA Method A)	12214500	12214501	12214502	12214505	12214506	12214507	12214510	12214511	12214512	12214515	12214516	12214517	12214520	12214521	12214522
CLP Sample ID		JRWM1	JRWM2	JRWM3	JRWM6	JRWM7	JRWM8	JRWN1	JRWN2	JRWN3	JRWN6	JRWN7	JRWN8	JRWP1	JRWP2	JRWP3
Station Number		JA01SB04	JA01SB08	JA01SB12	JA02SB04	JA02SB08	JA02SB12	JA03SB04	JA03SB08	JA03SB12	JA04SB04	JA04SB08	JA04SB12	JA05SB04	JA05SB08	JA05SB12
Sample Depth (feet)		0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12
Location		Former Printer Business						Former Pest Control Business								

Notes:

Bold type indicates the sample result is above the CRQL.

Shading and underlining indicates the sample result exceeds the regulatory standard.

a - Gasoline mixtures without benzene and the total ethyl benzene, toluene, and xylene are less than 1% of the gasoline mixture. For all other gasoline mixtures, a clean up level of 30 mg/kg applies.

b - If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

c - This is a total value for naphthalene, 1-methyl naphthalene, and 2-methyl naphthalene.

Key:

-- = Not Analyzed.

BaP = Benzo(a)pyrene.

CLP = Contract Laboratory Program.

CRQL = Contract Required Quantitation Limit.

EPA = United States Environmental Protection Agency.

ID = Identification.

J = The analyte was positively identified. The associated numerical value is an estimate.

MTCA = Model Toxics Control Act, Washington Department of Ecology.

mg/kg = milligrams per kilogram.

µg/kg = micrograms per kilogram.

NA = None available.

Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.

R = The data are unusable for all purposes.

TAL = Target Analyte List.

TEC = Toxicity Equivlant Concentration.

U = The analyte was not detected at or above the associated value.

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Table 4-9 Ground Water Samples Analytical Results Summary (µg/L)

EPA Sample ID CLP Sample ID Station Number Location	Regulatory Standards (MTCA Method A)	12214525	12214526	12214527	12214528	12214529	12214530	12214534	12214538	12214542	12424300	12424301	12274101	12214554
		JRWP6 MW01GW Monitoring Well 1	JRWP7 MW02GW Monitoring Well 2	JRWP8 MW03GW Monitoring Well 3	JRWP9 MW04GW Monitoring Well 4	JRWQ0 MW05GW Monitoring Well 5	JRWQ1 MW06GW Monitoring Well 6	JRWQ5 MW07GW Monitoring Well 7	JRWQ9 MW08GW Monitoring Well 8	JRWR3 MW09GW Monitoring Well 9	MW09GWD Monitoring Well 9	MW09GWT Monitoring Well 9	JRWT7 MW10GW Monitoring Well 10	JRWT1 TE06GW Test Pit 6
TAL Metals														
Aluminum	NA	140 JQ	200 U	163 JQ	119 JQ	144 JQ	12500 J	200 U	231	249			6650	31700 J
Arsenic	5	10 U	48.3	42.9	41.1	10 U	24							
Barium	NA	200 U			200 U	348 J								
Cadmium	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U			5 U	11.3
Calcium	NA	27700	43900	34700	43300	41900	47800	42900	35600	47600			37200	55700
Chromium	NA	10 U	22.2	10 U	10 U	10 U			37.6	48.5				
Copper	NA	25 U			25 U	327								
Iron	NA	219 J	200 J	277 J	499 J	1840 J	13700 J	100 U	237	270			7900	30200 J
Lead	15	10 U	9.5 JQ	10 U	10 U	2 JQ			4.8 JQ	812				
Magnesium	NA	22100	23400	15600	25600	12700	26100	28900	24400	28400			24000	22100
Manganese	NA	19.5	687	956	769	177	822	168	204	360			596	2010
Nickel	NA	40 U			48.3	76.9								
Potassium	NA	5000 U	5340 J	5000 U	5000 U	5000 U	6980 J	7700	7450	6830			5000 U	7110 J
Sodium	NA	13000	15500	9590	10800	6310	12400	33000	38800	19800			16000	12900
Vanadium	NA	50 U			15 JQ	89.8								
Zinc	NA	60 U			60 U	1290								
Total Petroleum Hydrocarbons														
TPH-GC/Motor Oil Range Organics	500	0.56 U	0.54 U	0.59 U	0.57 U	0.53 U	0.56 U	0.57 U	0.57 U	0.56 U			0.57 U	0.62
Semivolatile Organic Compounds														
Benzo(b)fluoranthene	NA	0.1 U			0.13 U	0.23								
Benzo(g,h,i)perylene	NA	0.1 U			0.1 U	0.16								
Benzo(k)fluoranthene	NA	0.1 U			0.1 U	0.13								
Chrysene	NA	0.1 U	0.1 U	0.1 U	0.069 JQ	0.1 U			0.1 U	0.12 J				
Phenanthrene	NA	0.1 U	0.1 U	0.1 U	0.083 JQ	0.1 U			0.1 U	0.12				
Pyrene	NA	0.1 U			0.1 U	0.16								
2-Methylnaphthalene	NA	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ			0.1 U	0.13				
Benzo(a)anthracene	NA	0.1 UJ	0.1 UJ	0.1 UJ	0.095 JQ	0.1 UJ			0.1 U	0.2				
Bis(2-ethylhexyl)phthalate	NA	2.2 JQ	2.2 JQ	7.7	14	2.7 JQ	1 JQ	15	9.4	13			5 U	2.8 JQ
Fluoranthene	NA	0.1 U	0.1 U	0.1 U	0.061 JQ	0.1 U			0.1 U	0.11				
Indeno(1,2,3-cd)pyrene	NA	0.1 U			0.11 U	0.16								
Naphthalene	160 ^a	0.1 U			0.1 U	0.1								
Pentachlorophenol	NA	R	R	R	0.2 UJ	R	R	R	R	R			0.2 U	0.2 UJ
BaP TEC from Table 4-7	0.1 ^b	0.0755	0.0755	0.0755	0.0751	0.0755	0.0755	0.0755	0.0755	0.0755			0.077	0.1296
Volatile Organic Compounds														
Bromomethane	NA	R	R	R	R	R	R	0.5 U	0.5 U	0.5 U			0.5 U	R

Table 4-9 Ground Water Samples Analytical Results Summary (µg/L)

Notes:

Bold type indicates the sample result is above the CRQL.

Shading and underlining indicates the sample result exceeds the regulatory standard.

a - This is a total value for naphthalene, 1-methyl naphthalene, and 2-methyl naphthalene.

b - If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

Key:

BaP = Benzo(a)pyrene.

CLP = Contract Laboratory Program.

CRQL = Contract Required Quantitation Limit.

EPA = United States Environmental Protection Agency.

ID = Identification.

J = The analyte was positively identified. The associated numerical value is an estimate.

MTCA = Model Toxics Control Act, Washington Department of Ecology.

µg/L = micrograms per liter.

NA = None available.

Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.

R = The data are unusable for all purposes.

TAL = Target Analyte List.

TEC = Toxicity Equivlant Concentration.

U = The analyte was not detected at or above the associated value.

Table 4-10 Investigation-Derived Waste Analytical Results Summary

EPA Sample ID	12214555	12214556	12214562	12214563	12214564	12214565
CLP Sample ID	JWRS6	JRWS7	JRWT3	JRWT4	JRWT5	JRWT6
Station Location Description	ID01WT	ID02WT	ID03WT	ID04WT	ID05WT	ID06WT
TAL Metals (µg/L)						
Aluminum	67200 J	--	--	--	--	1890
Arsenic	32.7	--	--	--	--	10 U
Barium	253 J	--	--	--	--	200 U
Calcium	27400	--	--	--	--	133000
Chromium	96.1	--	--	--	--	38.6
Copper	84.6	--	--	--	--	25 U
Iron	81100 J	--	--	--	--	1320
Lead	126	--	--	--	--	2.6 JQ
Magnesium	17000	--	--	--	--	5000 U
Manganese	661	--	--	--	--	38.1
Nickel	83.9	--	--	--	--	40 U
Potassium	19500 J	--	--	--	--	5920
Sodium	104000	--	--	--	--	20700
Zinc	604	--	--	--	--	60 U
Total Petroleum Hydrocarbons (µg/L)						
TPH-GC/Motor Oil Range Organics	0.68	0.56 U	0.59 U	0.54 U	0.53 U	0.52 U
Semivolatile Organic Compounds (µg/L)						
Pentachlorophenol	R	--	--	--	--	--
Volatile Organic Compounds (µg/L)						
2-Hexanone	6.3	3.8 U	4.6 U	5 U	5 U	5 U
Bromomethane	R	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.13 JQ	0.3	0.51	0.48	0.94	1.9
Toluene	0.5 U	11	0.35 JQ	0.15 JQ	0.5 U	44

Key:

-- = Not Analyzed.

CLP = Contract Laboratory Program.

CRQL = Contract Required Quantitation Limit.

EPA = United States Environmental Protection Agency.

ID = Identification.

J = The analyte was positively identified. The associated numerical value is an estimate.

µg/L = micrograms per liter.

Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.

R = The data are unusable for all purposes.

TAL = Target Analyte List.

U = The analyte was not detected at or above the associated value.

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Photographic Documentation

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SITE VISIT PHOTOGRAPHS

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Photo 1 Monitoring well MW5 on north end of property.

Direction: Down Date: 2/14/12 Time: 12:10



Photo 2 Monitoring well MW6 on east side of property.

Direction: Down Date: 2/14/12 Time: 12:15



Photo 3 Overview of former pest control business.

Direction: Northeast Date: 2/14/12 Time: 12:20

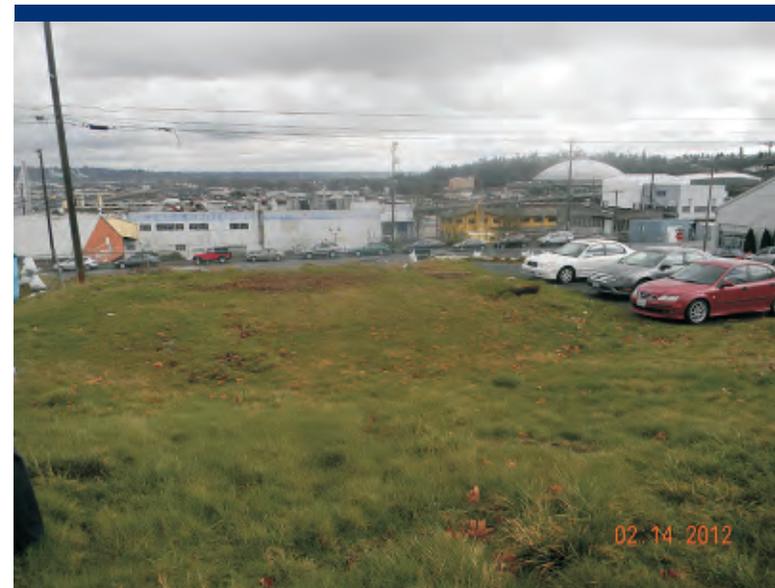


Photo 4 Overview of former pest control business.

Direction: East Date: 2/14/12 Time: 12:24



Photo 5 Former metal equipment storage area.

Direction: South Date: 2/14/12 Time: 12:26

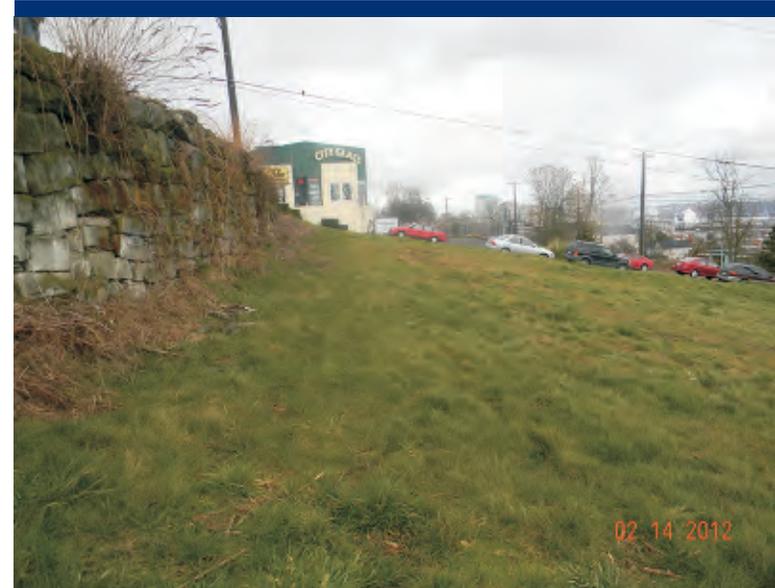


Photo 6 Former gas station at 2105 Tacoma Avenue South.

Direction: North Date: 2/14/12 Time: 12:37

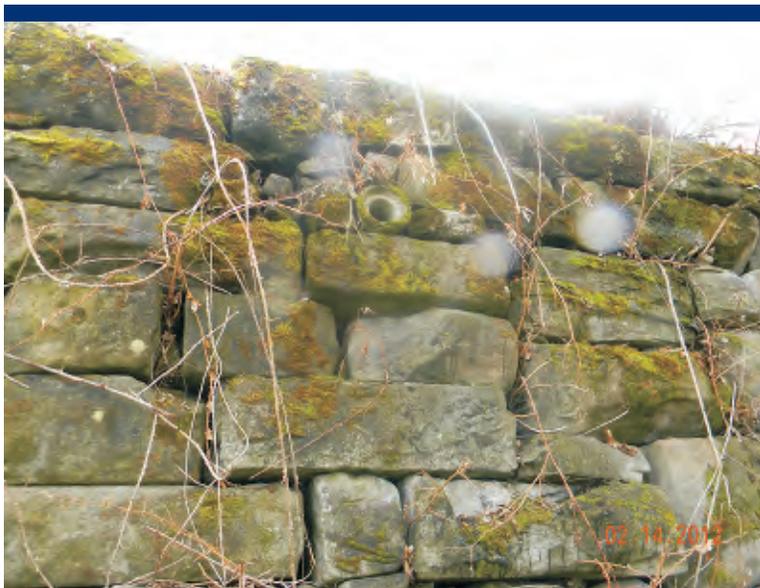


Photo 7 Concrete pipe opening in retaining wall at 2105 Tacoma Avenue South (former gas station).

Direction: West Date: 2/14/12 Time: 12:39



Photo 8 Possible location of former automobile storage area along South Fawcett Avenue.

Direction: Northeast Date: 2/14/12 Time: 12:52



Photo 9 New metal pipes extending from the location of the former automobile storage area.

Direction: Southeast Date: 2/14/12 Time: 12:54



Photo 10 Cone and newer gravel at location of former automobile storage area.

Direction: North Date: 2/14/12 Time: 12:55

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FIELD EVENT PHOTOGRAPHS

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Photo 1 Drilling of JA01 at the former printer business.

Direction: Southeast Date: 5/21/12 Time: 08:40

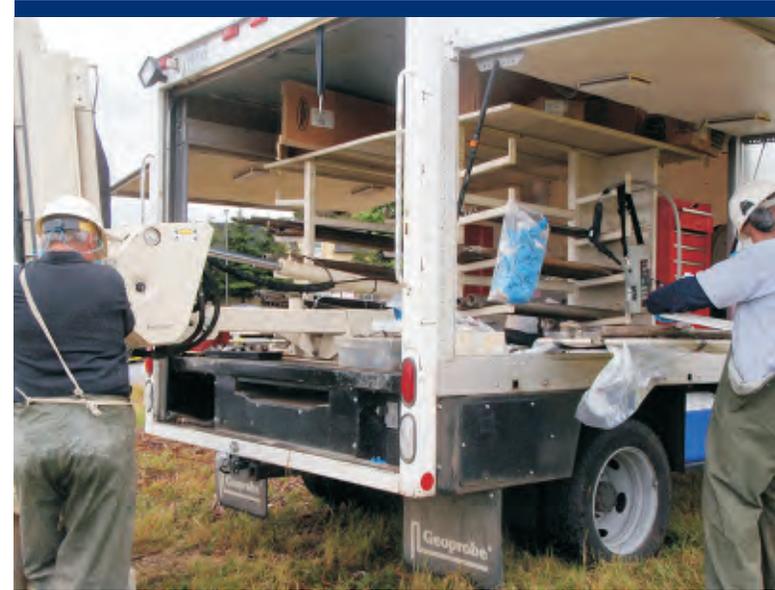


Photo 2 Drilling JA03 at former pest control business.

Direction: Southwest Date: 5/21/12 Time: 15:07



Photo 3 Drilling and sampling at JA05 at the former pest control business.

Direction: Southeast Date: 5/21/12 Time: 17:20

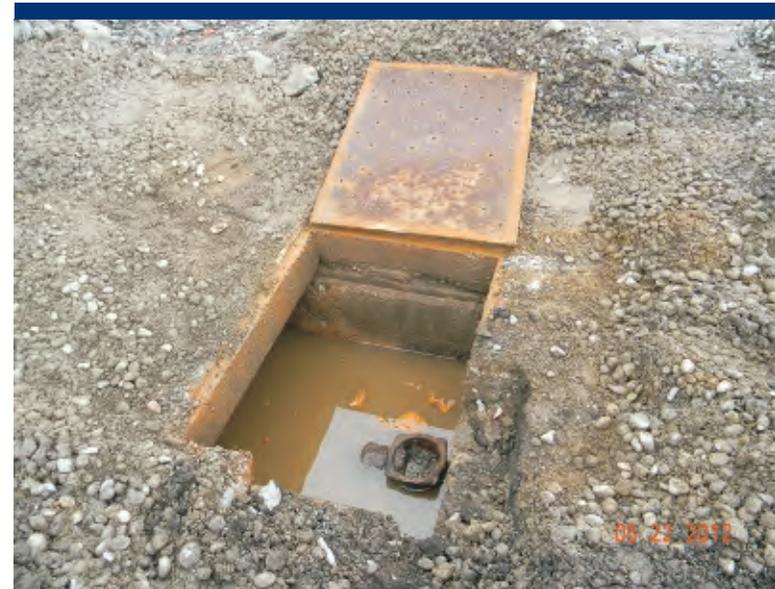


Photo 4 Catch basin found at Test Pit 1 on 2122 S. Jefferson Avenue.

Direction: Northwest Date: 5/22/12 Time: 08:55



Photo 5 Test Pit 2 with building footings and 1-inch rebar.

Direction: Down Date: 5/22/12 Time: 09:03



Photo 6 Metallic object appears to have been perhaps a sign post.

Direction: North Date: 5/22/12 Time: 09:05



Photo 7 Metal lid of catch basin showing perforations.

Direction: West Date: 5/22/12 Time: 09:09



Photo 8 Test Pit 3 with rebar and metal scrap.

Direction: Northwest Date: 5/22/12 Time: 09:36



Photo 9 Test Pit 4 with a piece of sheet metal.

Direction: Northwest Date: 5/22/12 Time: 09:38

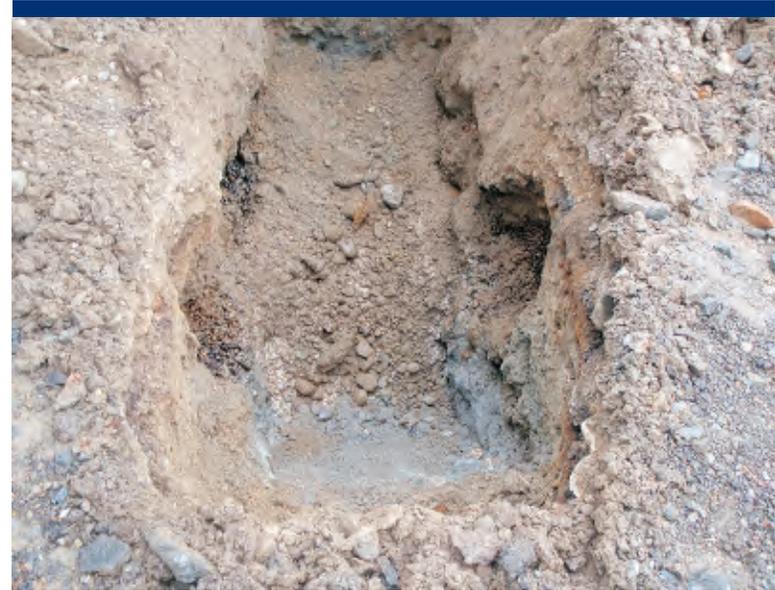


Photo 10 Test Pit 5 in which were found metal scraps.

Direction: North Date: 5/22/12 Time: 09:45

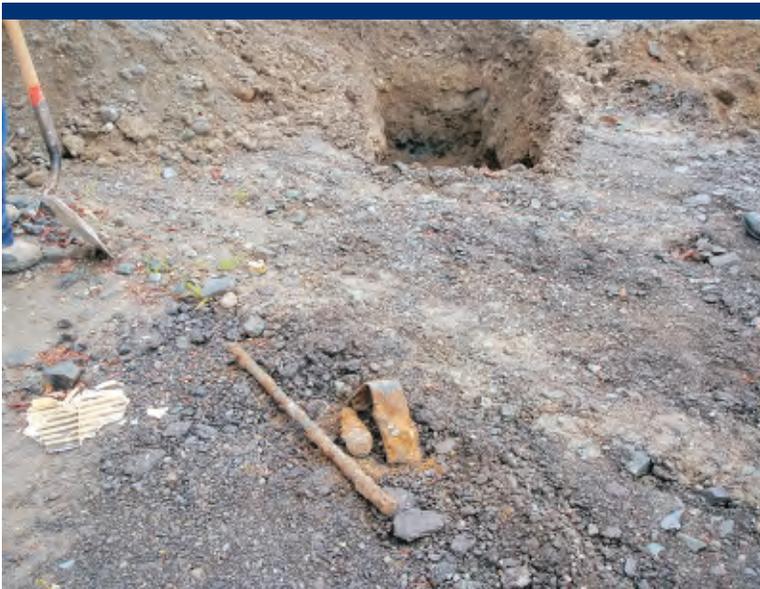


Photo 11 Metal debris from test Pit 5.

Direction: North Date: 5/22/12 Time: 09:46



Photo 12 Test Pit 8.

Direction: Northwest Date: 5/22/12 Time: 14:30

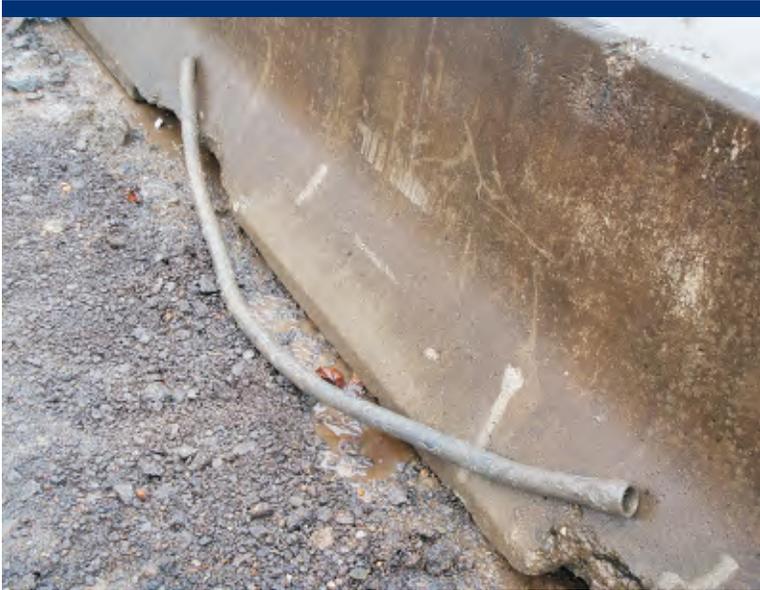


Photo 13 Metal pipe from Test Pit 8.

Direction: Northeast Date: 5/22/12 Time: 14:32



Photo 14 Test Pit 9.

Direction: East Date: 5/22/12 Time: 15:20



Photo 15 Installing monitoring well MW7.

Direction: Northeast Date: 5/23/12 Time: 11:40



Photo 16 Installing monitoring well MW9.

Direction: East Date: 5/24/12 Time: 11:48



Photo 17 Completed monitoring well MW8.

Direction: Southeast Date: 5/25/12 Time: 07:18



Photo 18 New bollards around MW1.

Direction: East Date: 5/25/12 Time: 07:21



Photo 19 Photo of a piece of plastic liner that is present on the northeast corner of S. Jefferson Ave at former 2102 S. Jefferson Avenue. The plastic is below fill, then asphalt, and above concrete rubble.

Direction: West Date: 5/25/12 Time: 08:15



Photo 20 Water investigation-derived waste drums.

Direction: West Date: 5/25/12 Time: 17:53



Photo 21 Soil investigation-derived waste drums.

Direction: West

Date: 5/25/12

Time: 17:54

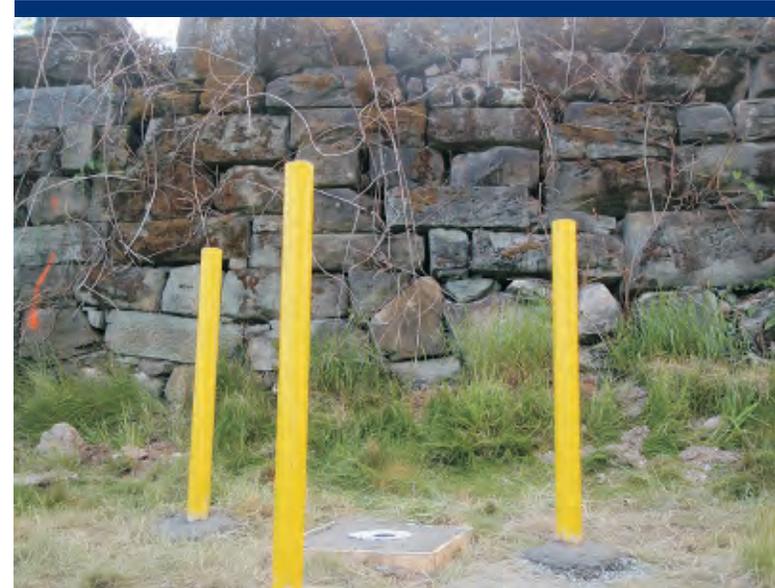


Photo 22 Monitoring well MW10 with bollards. Note concrete and metal pipes near top of retaining wall.

Direction: West

Date: 5/25/12

Time: 18:13

CONFIRMATION SAMPLING PHOTOGRAPHS

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Photo 1 Location of MW09. Preparing to purge well.

Direction: East Date: 10/18/12 Time: 10:45



Photo 2 Location of MW06. In-line with 2nd light post south of S. 21st Street.

Direction: East Date: 10/18/12 Time: 10:46

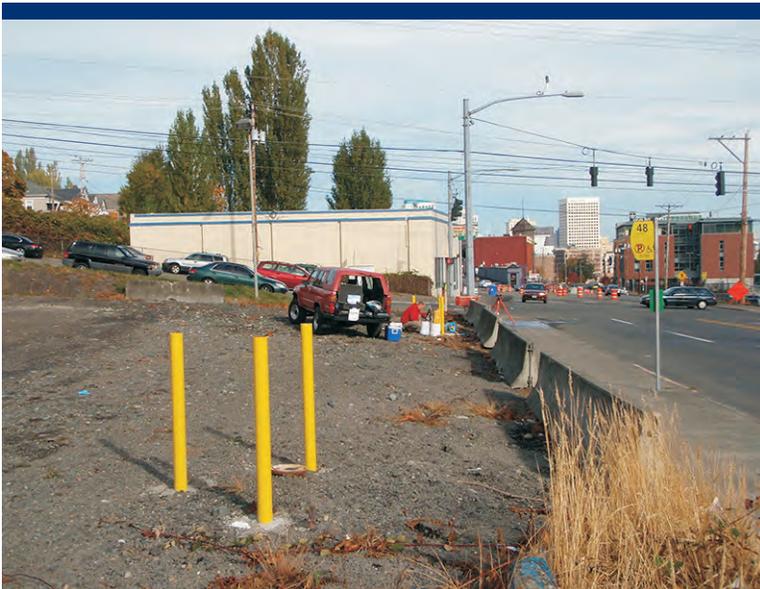


Photo 3 Location of MW06 in foreground and MW09 in background showing distances from sidewalk.

Direction: North Date: 10/18/12 Time: 10:48

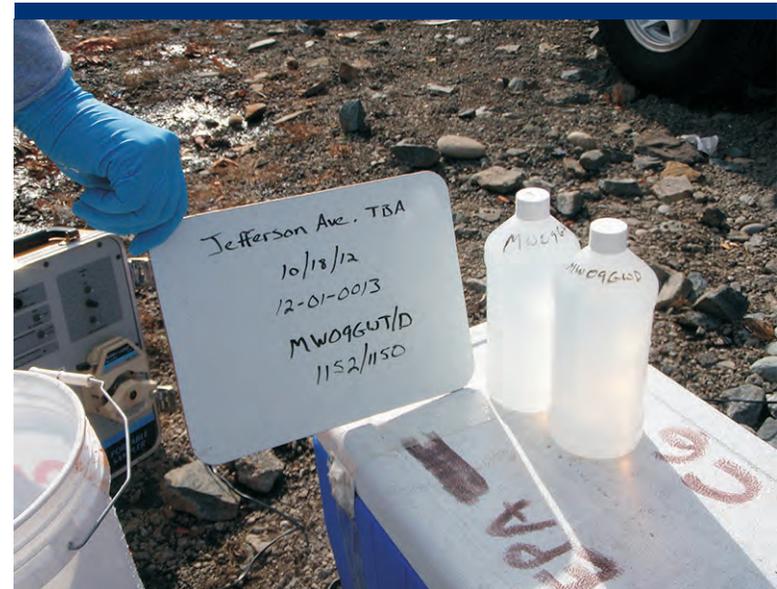


Photo 4 Samples MW09GWD and MW09SGT from MW9.

Direction: South Date: 10/18/12 Time: 11:55

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B

Sample Results and Data Validation Memoranda

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MEMORANDUM

DATE: June 27, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 12 water samples/blanks collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Trace Volatile Organic Compounds (TVOCs), TVOCs by Selective Ion Monitoring (SIM), Semivolatile Organic Compounds (SVOCs), SVOCs-SIM, and Aroclors (EPA CLP SOW SOM01.2) were performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

JRWP6	JRWP7	JRWP8	JRWP9	JRWQ0	JRWQ1
JRWS5	JRWS6	JRWS8	JRWS9	JRWT0	JRWT1

The original data memo listed an incorrect total number of samples; this discrepancy was corrected in a resubmission by the original reviewer. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.



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

June 26, 2012

Reply to: Donald M. Brown
Attn of: OEA-095

MEMORANDUM

Subject: Revised Data Validation Report for the Organic Analyses of the Water Samples Collected from the Jefferson Avenue Site - Case Number 42569, SDG JRWP6

From: Donald M. Brown, QA Chemist^{DMB}
USEPA Region 10, Office of Environmental Assessment, Environmental Services Unit

To: Joanne LaBaw, Site Assessment Manager
USEPA Region 10, 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 ten (10) water samples, one (1) rinsate blank, and one (1) trip blank collected from the above referenced site has been completed. This revision corrects an erroneous sample count. The trip blank and samples JRWS5 and JRWS9 were analyzed for Trace Volatile Organic Compounds (TVOCs) and TVOCs using Selective Ion Monitoring (SIM) only. The remaining samples were analyzed for TVOCs, TVOCs by SIM, Semivolatile Organic Compounds (SVOCs), SVOCs by SIM, and/or Aroclors. Only samples JRWS6 and JRWS8 were also analyzed for Pesticides. All samples were analyzed by A4 Scientific, Inc. located in The Woodlands, TX. As requested by the project, there were two modifications to the analyses. One modification (under Modification Reference Number 1978.2) required the laboratory to analyze thirteen TVOCs using SIM analysis at a Contract Required Quantitation Limit (CRQL) of 0.20 µg/L if the result was undetected or detected below the CRQL in the full scan analysis. The second modification (under Modification Reference Number 1930.2) required the laboratory to analyze all Aroclors at a CRQL of 0.10 µg/L.

All sample analyses were evaluated following EPA's Stage 3 Data Validation Electronic Process (S3VE). The validation was conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the Jefferson Avenue Site, Targeted Brownfields Assessment (May 2012); the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2); the Contract Laboratory Program's National Functional Guidelines for Organic Data Review; and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer. The conclusions presented herein are based on the information provided for the review.

Trace volatile SIM samples JRWP8, JRWS5, and JRWT0 were reanalyzed due to several QC failures; therefore, results for these samples were reported from the reanalyses.

Pesticide sample JRWS8 did not meet the holding time requirement (i.e., greater than seven days from sample collection to sample extraction), thus the results were considered estimates for this sample and were qualified "J" or "UJ".

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction, and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Trace Volatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	Y*	Non-detect or < 5X Blank [†]
Trace Volatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Pesticide Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank
Aroclor Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank

*See the Summary of Validation Qualifiers Applied section below for an explanation of qualifications affecting the data.

†10X Blank for ketones or solvents.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified "U" and were reported at the CRQL or at the level of detection due to method and/or storage blank contamination.

All sample data with values reported below the CRQL were qualified "J".

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 that the analyte is present. The associated numerical result is an estimate.

Attachments:

Sample Summary Report
Analytical Sample Listing (Report #6)

Sample Summary Report

Case No: 42569	Contract: EPW10018	SDG No: JRWP6	Lab Code: A4
Sample Number: JRWP6	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214525	pH: 2.0	Sample Date: 05222012	Sample Time: 15:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP6	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214525	pH:	7.8	Sample Date:	05222012	Sample Time:	15:30:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.86	ug/L	1.0	J	J <i>Qmw</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	2.2	ug/L	1.0	J	J <i>Qmw</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.2	ug/L	1.0	J	J <i>QML</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP6	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214525	pH:	7.8	Sample Date:	05222012	Sample Time:	15:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP6	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214525	pH:	7.8	Sample Date:	05222012	Sample Time:	15:30:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP6	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214525	pH:	2.0	Sample Date:	05222012	Sample Time:	15:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP7	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214526	pH:	8.0	Sample Date:	05222012	Sample Time:	16:25:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP7	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214526	pH:	2.0	Sample Date:	05222012	Sample Time:	16:25:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP7	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214526	pH:	8.0	Sample Date:	05222012	Sample Time:	16:25:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.90	ug/L	1.0	J	J <i>QW</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	2.2	ug/L	1.0	J	J <i>QW</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.2	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP7	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214526	pH:	2.0	Sample Date:	05222012	Sample Time:	16:25:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.32	ug/L	1.0	J	J <i>Qme</i>	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP7	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214526	pH:	8.0	Sample Date:	05222012	Sample Time:	16:25:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP8	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214527	pH:	2.0	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture:				% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	R	No	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	R	No	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	R	No	S3VE
Benzene	0.20	ug/L	1.0	U	R	No	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	R	No	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	R	No	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	R	No	S3VE
Chloroform	0.20	ug/L	1.0	U	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP8	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214527	pH:	2.0	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP8	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214527	pH:	8.1	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP8	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214527	pH:	8.1	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP8	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214527	pH:	8.1	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.89	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	7.7	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	7.7	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP8RE	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214527	pH:	2.0	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214528	pH:	2.0	Sample Date:	05222012	Sample Time:	15:55:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP9	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214528	pH:	8.0	Sample Date:	05222012	Sample Time:	15:55:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	UJ	Yes	S3VE
Phenanthrene	0.083	ug/L	1.0	J	J <i>Qmk</i>	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.061	ug/L	1.0	J	J <i>Qmk</i>	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.095	ug/L	1.0	J	J <i>Qmk</i>	Yes	S3VE
Chrysene	0.069	ug/L	1.0	J	J <i>Qmk</i>	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP9	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214528	pH:	8.0	Sample Date:	05222012	Sample Time:	15:55:00
% Moisture:				% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	1.4	ug/L	1.0	J	J <i>Qaw</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	14	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	14	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
n-Hexadecanoic acid			1.0	JN	JN	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP9	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214528	pH:	2.0	Sample Date:	05222012	Sample Time:	15:55:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWP9	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214528	pH:	8.0	Sample Date:	05222012	Sample Time:	15:55:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ0	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214529	pH:	7.4	Sample Date:	05222012	Sample Time:	16:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ0	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214529	pH:	2.0	Sample Date:	05222012	Sample Time:	16:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ0	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214529	pH:	2.0	Sample Date:	05222012	Sample Time:	16:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ0	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214529	pH:	7.4	Sample Date:	05222012	Sample Time:	16:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.74	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	2.7	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.7	ug/L	1.0	J	J Q	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ0	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214529	pH:	7.4	Sample Date:	05222012	Sample Time:	16:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ1	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214530	pH:	2.0	Sample Date:	05222012	Sample Time:	16:14:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.20	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ1	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214530	pH:	2.0	Sample Date:	05222012	Sample Time:	16:14:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ1	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214530	pH:	8.6	Sample Date:	05222012	Sample Time:	16:14:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ1	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214530	pH:	8.6	Sample Date:	05222012	Sample Time:	16:14:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.71	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	1.0	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1.0	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWQ1	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214530	pH:	8.6	Sample Date:	05222012	Sample Time:	16:14:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS5	Method:	VOA_SIM	Matrix:	Water	MA Number:	I978.2
Sample Location:	12214560	pH:	2.0	Sample Date:	05222012	Sample Time:	17:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	R	No	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	R	No	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	R	No	S3VE
Benzene	0.20	ug/L	1.0	U	R	No	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	R	No	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	R	No	S3VE
Chloroform	0.20	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	R	No	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS5	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214560	pH:	2.0	Sample Date:	05222012	Sample Time:	17:05:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Heptanone, 2,6-dimethyl-			1.0	JN	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS5RE	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214560	pH:	2.0	Sample Date:	05222012	Sample Time:	17:05:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS6	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214555	pH:	8.2	Sample Date:	05222012	Sample Time:	14:10:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS6	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214555	pH:	2.0	Sample Date:	05222012	Sample Time:	14:10:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	UJ	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	UJ	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	6.3	ug/L	1.0			Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Octanal			1.0	JN	JN	Yes	S3VE
Hexanal			1.0	JN	JN	Yes	S3VE
Heptanal			1.0	JN	JN	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE
Nonanal			1.0	JN	JN	Yes	S3VE
Decanal			1.0	JN	JN	Yes	S3VE
Butanal			1.0	JN	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWP6	Lab Code: A4
Sample Number: JRWS6	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214555	pH: 2.0	Sample Date: 05222012	Sample Time: 14:10:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.13	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,1,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS6	Method:	Pest	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214555	pH:	8.2	Sample Date:	05222012	Sample Time:	14:10:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	0.050	ug/L	1.0	U	U	Yes	S3VE
beta-BHC	0.050	ug/L	1.0	U	U	Yes	S3VE
delta-BHC	0.050	ug/L	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	0.050	ug/L	1.0	U	U	Yes	S3VE
Heptachlor	0.050	ug/L	1.0	U	U	Yes	S3VE
Aldrin	0.050	ug/L	1.0	U	U	Yes	S3VE
Heptachlor epoxide	0.050	ug/L	1.0	U	U	Yes	S3VE
Endosulfan I	0.050	ug/L	1.0	U	U	Yes	S3VE
Dieldrin	0.10	ug/L	1.0	U	U	Yes	S3VE
4,4'-DDE	0.10	ug/L	1.0	U	U	Yes	S3VE
Endrin	0.10	ug/L	1.0	U	U	Yes	S3VE
Endosulfan II	0.10	ug/L	1.0	U	U	Yes	S3VE
4,4'-DDD	0.10	ug/L	1.0	U	U	Yes	S3VE
Endosulfan sulfate	0.10	ug/L	1.0	U	U	Yes	S3VE
4,4'-DDT	0.10	ug/L	1.0	U	U	Yes	S3VE
Methoxychlor	0.50	ug/L	1.0	U	U	Yes	S3VE
Endrin ketone	0.10	ug/L	1.0	U	U	Yes	S3VE
Endrin aldehyde	0.10	ug/L	1.0	U	U	Yes	S3VE
alpha-Chlordane	0.050	ug/L	1.0	U	U	Yes	S3VE
gamma- Chlordane	0.050	ug/L	1.0	U	U	Yes	S3VE
Toxaphene	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS8	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214557	pH:	2.0	Sample Date:	05212012	Sample Time:	14:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS8	Method:	Pest	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214557	pH:	8.1	Sample Date:	05212012	Sample Time:	14:00:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	0.050	ug/L	1.0	U	UJ	Yes	S3VE
beta-BHC	0.050	ug/L	1.0	U	UJ	Yes	S3VE
delta-BHC	0.050	ug/L	1.0	U	UJ	Yes	S3VE
gamma-BHC (Lindane)	0.050	ug/L	1.0	U	UJ	Yes	S3VE
Heptachlor	0.050	ug/L	1.0	U	UJ	Yes	S3VE
Aldrin	0.050	ug/L	1.0	U	UJ	Yes	S3VE
Heptachlor epoxide	0.050	ug/L	1.0	U	UJ	Yes	S3VE
Endosulfan I	0.050	ug/L	1.0	U	UJ	Yes	S3VE
Dieldrin	0.10	ug/L	1.0	U	UJ	Yes	S3VE
4,4'-DDE	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Endrin	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Endosulfan II	0.10	ug/L	1.0	U	UJ	Yes	S3VE
4,4'-DDD	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Endosulfan sulfate	0.10	ug/L	1.0	U	UJ	Yes	S3VE
4,4'-DDT	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Methoxychlor	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Endrin ketone	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Endrin aldehyde	0.10	ug/L	1.0	U	UJ	Yes	S3VE
alpha-Chlordane	0.050	ug/L	1.0	U	UJ	Yes	S3VE
gamma- Chlordane	0.050	ug/L	1.0	U	UJ	Yes	S3VE
Toxaphene	5.0	ug/L	1.0	U	UJ	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS8	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214557	pH:	2.0	Sample Date:	05212012	Sample Time:	14:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWS9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214558	pH:	2.0	Sample Date:	05242012	Sample Time:	10:35:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Heptanone, 2,6-dimethyl-			1.0	JN	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWP6	Lab Code: A4
Sample Number: JRWS9	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214558	pH: 2.0	Sample Date: 05242012	Sample Time: 10:35:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWT0	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214559	pH:	2.0	Sample Date:	05212012	Sample Time:	07:35:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	R	No	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	R	No	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	R	No	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	R	No	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	R	No	S3VE
Benzene	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	R	No	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	R	No	S3VE
Chloroform	0.20	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	R	No	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWP6	Lab Code: A4
Sample Number: JRWT0	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214559	pH: 2.0	Sample Date: 05212012	Sample Time: 07:35:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,1,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWT0RE	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214559	pH:	2.0	Sample Date:	05212012	Sample Time:	07:35:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWT1	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214554	pH:	2.0	Sample Date:	05222012	Sample Time:	11:45:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	R	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWT1	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214554	pH:	8.1	Sample Date:	05222012	Sample Time:	11:45:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.59	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	2.8	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.8	ug/L	1.0	J	J <i>QW</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Cyclic octaatomic sulfur			1.0	JN	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWP6	Lab Code: A4
Sample Number: JRWT1	Method: Aroclor	Matrix: Water	MA Number: 1930.2
Sample Location: 12214554	pH: 8.1	Sample Date: 05222012	Sample Time: 11:45:00
% Moisture:	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWP6	Lab Code:	A4
Sample Number:	JRWT1	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214554	pH:	8.1	Sample Date:	05222012	Sample Time:	11:45:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0			Yes	S3VE
2-Methylnaphthalene	0.13	ug/L	1.0			Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	UJ	Yes	S3VE
Phenanthrene	0.12	ug/L	1.0			Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.11	ug/L	1.0			Yes	S3VE
Pyrene	0.16	ug/L	1.0			Yes	S3VE
Benzo(a)anthracene	0.20	ug/L	1.0			Yes	S3VE
Chrysene	0.12	ug/L	1.0		J	Yes	S3VE
Benzo(b)fluoranthene	0.23	ug/L	1.0			Yes	S3VE
Benzo(k)fluoranthene	0.13	ug/L	1.0			Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.16	ug/L	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	0.064	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE
Benzo(g,h,i)perylene	0.16	ug/L	1.0			Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWP6	Lab Code: A4
Sample Number: JRWT1	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214554	pH: 2.0	Sample Date: 05222012	Sample Time: 11:45:00
% Moisture:	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWP6 Case 42569 Contract EPW10018 Region 10 DDTID 153429 SOW SOM01.2

Analytical Sample Listing

VOA_Trace

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWP6	Field_Sample	Water	Trace	05222012 15:30:00	05242012 09:51:00			05252012 16:23:00	DB-624	H-5975
JRWP7	Field_Sample	Water	Trace	05222012 16:25:00	05242012 09:51:00			05252012 16:49:00	DB-624	H-5975
JRWP8	Field_Sample	Water	Trace	05222012 15:45:00	05242012 09:51:00			05252012 17:15:00	DB-624	H-5975
JRWP9	Field_Sample	Water	Trace	05222012 15:55:00	05242012 09:51:00			05252012 17:40:00	DB-624	H-5975
JRWQ0	Field_Sample	Water	Trace	05222012 16:05:00	05242012 09:51:00			05252012 18:06:00	DB-624	H-5975
JRWQ1	Field_Sample	Water	Trace	05222012 16:14:00	05242012 09:51:00			05252012 18:32:00	DB-624	H-5975
JRWS5	Field_Sample	Water	Trace	05222012 17:05:00	05252012 09:25:00			05302012 13:09:00	DB-624	H-5975
JRWS6	Field_Sample	Water	Trace	05222012 14:10:00	05252012 09:25:00			05302012 14:01:00	DB-624	H-5975
JRWS8	Field_Sample	Water	Trace	05212012 14:00:00	05242012 09:51:00			05252012 18:58:00	DB-624	H-5975
JRWS9	Field_Sample	Water	Trace	05242012 10:35:00	05252012 09:25:00			05302012 13:35:00	DB-624	H-5975
JRWT0	Field_Sample	Water	Trace	05212012 07:35:00	05242012 09:51:00			05252012 19:24:00	DB-624	H-5975
JRWT1	Field_Sample	Water	Trace	05222012 11:45:00	05242012 09:51:00			05262012 21:19:00	DB-624	H-5975

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Lab A4(A4 SCIENTIFIC, INC.) SDG JRWP6 Case 42569 Contract EPW10018 Region 10 DDTID 153429 SOW SOM01.2

Analytical Sample Listing

VOA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWP6	Field_Sample	Water		05222012 15:30:00	05242012 09:51:00			06022012 18:52:00	DB-624	H-5975
JRWP7	Field_Sample	Water		05222012 16:25:00	05242012 09:51:00			06032012 00:03:00	DB-624	H-5975
JRWP8	Field_Sample	Water		05222012 15:45:00	05242012 09:51:00			06022012 18:23:00	DB-624	H-5975
JRWP8RE	Field_Sample	Water		05222012 15:45:00	05242012 09:51:00			06022012 19:45:00	DB-624	H-5975
JRWP9	Field_Sample	Water		05222012 15:55:00	05242012 09:51:00			06022012 20:11:00	DB-624	H-5975
JRWQ0	Field_Sample	Water		05222012 16:05:00	05242012 09:51:00			06022012 20:37:00	DB-624	H-5975
JRWQ1	Field_Sample	Water		05222012 16:14:00	05242012 09:51:00			06032012 12:06:00	DB-624	H-5975
JRWS5	Field_Sample	Water		05222012 17:05:00	05252012 09:25:00			06022012 22:46:00	DB-624	H-5975
JRWS5RE	Field_Sample	Water		05222012 17:05:00	05252012 09:25:00			06032012 12:58:00	DB-624	H-5975
JRWS6	Field_Sample	Water		05222012 14:10:00	05252012 09:25:00			06022012 23:12:00	DB-624	H-5975
JRWS8	Field_Sample	Water		05212012 14:00:00	05242012 09:51:00			06022012 21:28:00	DB-624	H-5975
JRWS9	Field_Sample	Water		05242012 10:35:00	05252012 09:25:00			06022012 23:37:00	DB-624	H-5975
JRWT0	Field_Sample	Water		05212012 07:35:00	05242012 09:51:00			06022012 21:54:00	DB-624	H-5975
JRWT0RE	Field_Sample	Water		05212012 07:35:00	05242012 09:51:00			06032012 12:32:00	DB-624	H-5975
JRWT1	Field_Sample	Water		05222012 11:45:00	05242012 09:51:00			06032012 00:29:00	DB-624	H-5975

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWP6 Case 42569 Contract EPW10018 Region 10 DDTID 153429 SOW SOM01.2

Analytical Sample Listing

BNA

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWP6	Field_Sample	Water	Low	05222012 15:30:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 19:16:00	HP-5MS	E-5973
JRWP7	Field_Sample	Water	Low	05222012 16:25:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 19:48:00	HP-5MS	E-5973
JRWP8	Field_Sample	Water	Low	05222012 15:45:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 20:18:00	HP-5MS	E-5973
JRWP9	Field_Sample	Water	Low	05222012 15:55:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 20:50:00	HP-5MS	E-5973
JRWQ0	Field_Sample	Water	Low	05222012 16:05:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 21:21:00	HP-5MS	E-5973
JRWQ1	Field_Sample	Water	Low	05222012 16:14:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 21:52:00	HP-5MS	E-5973
JRWT1	Field_Sample	Water	Low	05222012 11:45:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06072012 22:23:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWP6 Case 42569 Contract EPW10018 Region 10 DDTID 153429 SOW SOM01.2

Analytical Sample Listing

BNA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWP6	Field_Sample	Water		05222012 15:30:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06022012 02:40:00	HP-5MS	E-5973
JRWP7	Field_Sample	Water		05222012 16:25:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06022012 03:11:00	HP-5MS	E-5973
JRWP8	Field_Sample	Water		05222012 15:45:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06022012 03:43:00	HP-5MS	E-5973
JRWP9	Field_Sample	Water		05222012 15:55:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06102012 18:26:00	HP-5MS	E-5973
JRWQ0	Field_Sample	Water		05222012 16:05:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06022012 04:45:00	HP-5MS	E-5973
JRWQ1	Field_Sample	Water		05222012 16:14:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06022012 05:17:00	HP-5MS	E-5973
JRWT1	Field_Sample	Water		05222012 11:45:00	05242012 09:51:00	Liq_Liq	05292012 13:30:00	06102012 18:58:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWP6 Case 42569 Contract EPW10018 Region 10 DDTID 153429 SOW SOM01.2

Analytical Sample Listing

Pest

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWS6	Field_Sample	Water		05222012 14:10:00	05252012 09:25:00	Sep_Funnel	05292012 14:00:00	06052012 16:20:26	RTX-PEST	C-6890A
JRWS6	Field_Sample	Water		05222012 14:10:00	05252012 09:25:00	Sep_Funnel	05292012 14:00:00	06052012 17:00:12	RTX-PEST2	C-6890B
JRWS8	Field_Sample	Water		05212012 14:00:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06052012 15:40:53	RTX-PEST	C-6890A
JRWS8	Field_Sample	Water		05212012 14:00:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06052012 16:20:26	RTX-PEST2	C-6890B

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWP6 Case 42569 Contract EPW10018 Region 10 DDTID 153429 SOW SOM01.2

Analytical Sample Listing

Aroclor

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWP6	Field_Sample	Water		05222012 15:30:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 13:15:12	DB-XLB	F-6890A
JRWP6	Field_Sample	Water		05222012 15:30:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 13:45:04	DB-35MS	F-6890B
JRWP7	Field_Sample	Water		05222012 16:25:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 13:45:04	DB-XLB	F-6890A
JRWP7	Field_Sample	Water		05222012 16:25:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 14:14:57	DB-35MS	F-6890B
JRWP8	Field_Sample	Water		05222012 15:45:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 15:45:50	DB-XLB	F-6890A
JRWP8	Field_Sample	Water		05222012 15:45:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 16:15:42	DB-35MS	F-6890B
JRWP9	Field_Sample	Water		05222012 15:55:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 16:15:42	DB-XLB	F-6890A
JRWP9	Field_Sample	Water		05222012 15:55:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 16:45:32	DB-35MS	F-6890B
JRWQ0	Field_Sample	Water		05222012 16:05:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 16:45:32	DB-XLB	F-6890A
JRWQ0	Field_Sample	Water		05222012 16:05:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 17:15:24	DB-35MS	F-6890B
JRWQ1	Field_Sample	Water		05222012 16:14:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 17:15:24	DB-XLB	F-6890A
JRWQ1	Field_Sample	Water		05222012 16:14:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 17:45:23	DB-35MS	F-6890B
JRWS6	Field_Sample	Water		05222012 14:10:00	05252012 09:25:00	Sep_Funnel	05292012 14:00:00	06072012 18:15:16	DB-XLB	F-6890A
JRWS6	Field_Sample	Water		05222012 14:10:00	05252012 09:25:00	Sep_Funnel	05292012 14:00:00	06072012 18:45:15	DB-35MS	F-6890B
JRWT1	Field_Sample	Water		05222012 11:45:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 17:45:23	DB-XLB	F-6890A
JRWT1	Field_Sample	Water		05222012 11:45:00	05242012 09:51:00	Sep_Funnel	05292012 14:00:00	06072012 18:15:16	DB-35MS	F-6890B

Edit History Report

Case No: 42569

Contract: EPW10018

SDG No: JRWP6

Lab Code: A4

Method: VOA_Trace

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP6	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:23 PM	
JRWP6	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:23 PM	
JRWP7	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,1-Dichloroethane	Validation Flag	JQ	J	Donald Brown	6/22/12 4:32 PM	
JRWP7	Water	1,1-Dichloroethane	Validation Flag	J	JQ	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:28 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP7	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:28 PM	
JRWP7	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:28 PM	
JRWP8	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP8	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:35 PM	
JRWP8	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:35 PM	
JRWP9	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:39 PM	
JRWP9	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:39 PM	
JRWQ0	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ0	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:41 PM	
JRWQ0	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:41 PM	
JRWQ1	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ1	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:44 PM	
JRWQ1	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:44 PM	
JRWS5	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	4-Heptanone, 2,6-dimethyl-	Validation Flag		JN	Donald Brown	6/22/12 4:48 PM	
JRWS5	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:47 PM	
JRWS5	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:47 PM	
JRWS6	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS6	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dibromoethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dichloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Butanal	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Carbon tetrachloride	Validation Flag	UJ	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Decanal	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Heptanal	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Hexanal	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Nonanal	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Octanal	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Total Alkane TICs	Validation Flag		JN	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:50 PM	
JRWS6	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:50 PM	
JRWS8	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS8	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:53 PM	
JRWS8	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:53 PM	
JRWS9	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	4-Heptanone, 2,6-dimethyl-	Validation Flag		JN	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS9	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 4:56 PM	
JRWS9	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 4:56 PM	
JRWT0	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 5:01 PM	
JRWT0	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 5:01 PM	
JRWT1	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT1	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Benzene	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Benzene	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Chloroform	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/22/12 5:04 PM	
JRWT1	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/22/12 5:04 PM	

Method: VOA_SIM

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP8	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dibromoethane	Validation Flag	UJ	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dichloroethane	Validation Flag	UJ	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP8	Water	Benzene	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Benzene	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Carbon tetrachloride	Validation Flag	UJ	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Chloroform	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/25/12 2:16 PM	
JRWP8	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/25/12 2:16 PM	
JRWS5	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Benzene	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Benzene	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Chloroform	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/25/12 2:18 PM	
JRWS5	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/25/12 2:18 PM	
JRWT0	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT0	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Benzene	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Benzene	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Chloroform	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Chloroform	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	6/25/12 2:21 PM	
JRWT0	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	6/25/12 2:21 PM	

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP6	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP6	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(b)fluorant hene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(b)fluorant hene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(k)fluorant hene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Benzo(k)fluorant hene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:53 PM	
JRWP6	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:53 PM	
JRWP7	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:56 PM	
JRWP7	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:56 PM	
JRWP7	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(b)fluorant hene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(b)fluorant hene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP7	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 4:56 PM	
JRWP7	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 4:56 PM	
JRWP7	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:55 PM	
JRWP7	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:55 PM	
JRWP8	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP8	Water	Benzo(k)fluorant hene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 4:58 PM	
JRWP8	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 4:58 PM	
JRWP9	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(b)fluorant hene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(b)fluorant hene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(k)fluorant hene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Benzo(k)fluorant hene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWP9	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:01 PM	
JRWP9	Water	Total Alkane TICs	Validation Flag		JN	Donald Brown	6/25/12 5:02 PM	
JRWP9	Water	n-Hexadecanoic acid	Validation Flag		JN	Donald Brown	6/25/12 5:02 PM	
JRWQ0	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ0	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:04 PM	
JRWQ0	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:04 PM	
JRWQ1	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ1	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:07 PM	
JRWQ1	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:07 PM	
JRWT1	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Acenaphthene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Chrysene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Chrysene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Cyclic octaatomic sulfur	Validation Flag		JN	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Fluoranthene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Fluorene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Fluorene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT1	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Naphthalene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Naphthalene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Phenanthrene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Pyrene	Reportable	Y	N	Donald Brown	6/25/12 5:10 PM	
JRWT1	Water	Pyrene	Validation Flag	U	R	Donald Brown	6/25/12 5:10 PM	

Method: Pest



ecology and environment, inc.

Global Environmental Specialists

720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 28, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 11 soil samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), SVOCs by Selective Ion Monitoring (SIM), and polychlorinated biphenyls (CLP SOW SOM01.2) were performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

JRWQ2	JRWQ3	JRWQ4	JRWQ6	JRWQ7	JRWQ8
JRWR0	JRWR2	JRWS1	JRWS2	JRWS3	

The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.

The di-n-butyl phthalate results in samples JRWQ4, JRWQ7, JRWQ8, JRWR0, and JRWR2 were qualified as not detected (U) based on associated rinsate blank contamination. The bis(2-ethylhexyl) phthalate results in samples JRWQ3, JRWQ4, JRWQ6, JRWQ7, JRWR0, and JRWR2 were qualified as not detected (U) based on associated rinsate blank contamination.



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

June 28, 2012

Reply to: Donald M. Brown
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Organic Analyses of the Soil Samples Collected from the Jefferson Avenue Site - Case Number 42569, SDG JRWQ3

From: Donald M. Brown, QA Chemist ^{DMB}
USEPA Region 10, Office of Environmental Assessment, Environmental Services Unit

To: Joanne LaBaw, Site Assessment Manager
USEPA Region 10, Office of Environmental Cleanup

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of eleven (11) soil samples collected from the above referenced site has been completed. Samples JRWS1, JRWS2, and JRWS3 were analyzed for Volatile Organic Compounds (VOCs) only. The remaining samples were analyzed for VOCs, Semivolatile Organic Compounds (SVOCs), SVOCs by Selective Ion Monitoring (SIM), and Aroclors. All samples were analyzed by A4 Scientific, Inc. located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 3 Data Validation Electronic Process (S3VE). The validation was conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the Jefferson Avenue Site, Targeted Brownfields Assessment (May 2012); the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2); the Contract Laboratory Program's National Functional Guidelines for Organic Data Review; and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction, and analyses is attached along with the validated data.

Due to high concentrations of target compounds, samples JRWQ2, JRWQ3, and JRWQ6 were analyzed at a ten-fold (10X) dilution in the semivolatile and semivolatile SIM analyses. Results for these samples were reported from the diluted analyses and the reporting limits are elevated.

I. QUALITY CONTROL RESULTS SUMMARY

Volatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	Y*	Non-detect or < 5X Blank [†]
Semivolatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Aroclor Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank

*See the Summary of Validation Qualifiers Applied section below for an explanation of qualifications affecting the data.

[†]10X Blank for ketones or solvents.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified “U” and were reported at the CRQL or at the level of detection due to method and/or storage blank contamination.

All sample data with values reported below the CRQL were qualified “J”.

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 that the analyte is present. The associated numerical result is an estimate.

Attachments:

Sample Summary Report

Analytical Sample Listing (Report #6)

Sample Summary Report

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWQ2	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214531	pH:	Sample Date: 05232012	Sample Time: 10:15:00
% Moisture: 6.68		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.0	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.0	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Methylcyclohexane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.0	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.0	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ2	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214531	pH:	8.3	Sample Date:	05232012	Sample Time:	10:15:00
% Moisture:	6.68			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ2	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214531	pH:	8.3	Sample Date:	05232012	Sample Time:	10:15:00
% Moisture :	6.68			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	1800	ug/kg	10.0	U	U	Yes	S3VE
Phenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Chlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	1800	ug/kg	10.0	U	U	Yes	S3VE
Acetophenone	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachloroethane	1800	ug/kg	10.0	U	U	Yes	S3VE
Nitrobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
Isophorone	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Nitrophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dimethylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Naphthalene	1800	ug/kg	10.0	U	R	No	S3VE
4-Chloroaniline	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachlorobutadiene	1800	ug/kg	10.0	U	U	Yes	S3VE
Caprolactam	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Methylnaphthalene	1800	ug/kg	10.0	U	R	No	S3VE
Hexachlorocyclopentadiene	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
1,1'-Biphenyl	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Chloronaphthalene	1800	ug/kg	10.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	3500	ug/kg	10.0	U	U	Yes	S3VE
Dimethylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	1800	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthylene	1800	ug/kg	10.0	U	R	No	S3VE
3-Nitroaniline	3500	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthene	1800	ug/kg	10.0	U	R	No	S3VE
2,4-Dinitrophenol	3500	ug/kg	10.0	U	U	Yes	S3VE
4-Nitrophenol	3500	ug/kg	10.0	U	U	Yes	S3VE
Dibenzofuran	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	1800	ug/kg	10.0	U	U	Yes	S3VE
Diethylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Fluorene	1800	ug/kg	10.0	U	R	No	S3VE
4-Chlorophenylphenylether	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Nitroaniline	3500	ug/kg	10.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	3500	ug/kg	10.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	1800	ug/kg	10.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Bromophenylphenylether	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachlorobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
Atrazine	1800	ug/kg	10.0	U	U	Yes	S3VE
Pentachlorophenol	3500	ug/kg	10.0	U	R	No	S3VE
Phenanthrene	1800	ug/kg	10.0	U	R	No	S3VE
Anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Carbazole	1800	ug/kg	10.0	U	U	Yes	S3VE
Di-n-butylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Fluoranthene	1800	ug/kg	10.0	U	R	No	S3VE
Pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Butylbenzylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	1800	ug/kg	10.0	U	U	Yes	S3VE
Benzo(a)anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Chrysene	1800	ug/kg	10.0	U	R	No	S3VE
Bis(2-ethylhexyl)	1400	ug/kg	10.0	J	J	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1400	ug/kg	10.0	J	<i>Q</i> U	Yes	S3VE
Di-n-octylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(k)fluorant hene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(a)pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(g,h,i)perylene	1800	ug/kg	10.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Total Alkane TICs			10.0	J	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ2	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214531	pH:	8.3	Sample Date:	05232012	Sample Time:	10:15:00
% Moisture:	6.68			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	35	ug/kg	10.0	U	U	Yes	S3VE
2-Methylnaphthalene	35	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthylene	35	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthene	35	ug/kg	10.0	U	U	Yes	S3VE
Fluorene	35	ug/kg	10.0	U	U	Yes	S3VE
Pentachlorophenol	71	ug/kg	10.0	U	U	Yes	S3VE
Phenanthrene	38	ug/kg	10.0		J	Yes	S3VE
Anthracene	35	ug/kg	10.0	U	U	Yes	S3VE
Fluoranthene	30	ug/kg	10.0	J	J <i>Qmu</i>	Yes	S3VE
Pyrene	33	ug/kg	10.0	J	J	Yes	S3VE
Benzo(a)anthracene	22	ug/kg	10.0	J	J	Yes	S3VE
Chrysene	35	ug/kg	10.0	J	J	Yes	S3VE
Benzo(b)fluoranthene	27	ug/kg	10.0	J	J	Yes	S3VE
Benzo(k)fluoranthene	20	ug/kg	10.0	J	J	Yes	S3VE
Benzo(a)pyrene	2.3	ug/kg	10.0	J	J	Yes	S3VE
Indeno(1,2,3-cd)pyrene	23	ug/kg	10.0	J	J	Yes	S3VE
Dibenzo(a,h)anthracene	27	ug/kg	10.0	J	J	Yes	S3VE
Benzo(g,h,i)perylene	31	ug/kg	10.0	J	J	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ2MS	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214531	pH:		Sample Date:	05232012	Sample Time:	10:15:00
% Moisture :	6.68			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	37	ug/kg	1.0			Yes	S3VE
Dichlorodifluoro methane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Benzene	47	ug/kg	1.0			Yes	S3VE
Trichloroethene	38	ug/kg	1.0			Yes	S3VE
Bromomethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Toluene	48	ug/kg	1.0			Yes	S3VE
Chloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	45	ug/kg	1.0			Yes	S3VE
Trichlorofluorom ethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.0	ug/kg	1.0	J	U	Yes	S3VE
Methyl tert-butyl ether	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom ethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.0	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.0	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ2MSD	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214531	pH:		Sample Date:	05232012	Sample Time:	10:15:00
% Moisture:	6.68	% Solids:					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	36	ug/kg	1.0			Yes	S3VE
Chloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Benzene	45	ug/kg	1.0			Yes	S3VE
Trichloroethene	37	ug/kg	1.0			Yes	S3VE
Toluene	46	ug/kg	1.0			Yes	S3VE
Bromomethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	44	ug/kg	1.0			Yes	S3VE
Trichlorofluorom ethane	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
Methylene chloride	5.0	ug/kg	1.0	J	UJ	Yes	S3VE
Methyl tert-butyl ether	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
1,1-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
Cyclohexane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
1,2-Dichloroethane	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom ethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.0	ug/kg	1.0	U	UJ	Yes	S3VE
Ethylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.0	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.0	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ3	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214532	pH:	8.9	Sample Date:	05232012	Sample Time:	10:25:00
% Moisture:	7.44			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ3	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214532	pH:		Sample Date:	05232012	Sample Time:	10:25:00
% Moisture :	7.44	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	96	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.8	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ3	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214532	pH:	8.9	Sample Date:	05232012	Sample Time:	10:25:00
% Moisture :	7.44			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	1800	ug/kg	10.0	U	U	Yes	S3VE
Phenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Chlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	1800	ug/kg	10.0	U	U	Yes	S3VE
Acetophenone	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachloroethane	1800	ug/kg	10.0	U	U	Yes	S3VE
Nitrobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
Isophorone	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Nitrophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dimethylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Naphthalene	1800	ug/kg	10.0	U	R	No	S3VE
4-Chloroaniline	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachlorobutadiene	1800	ug/kg	10.0	U	U	Yes	S3VE
Caprolactam	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Methylnaphthalene	1800	ug/kg	10.0	U	R	No	S3VE
Hexachlorocyclopentadiene	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
1,1'-Biphenyl	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Chloronaphthalene	1800	ug/kg	10.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	3600	ug/kg	10.0	U	U	Yes	S3VE
Dimethylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	1800	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthylene	1800	ug/kg	10.0	U	R	No	S3VE
3-Nitroaniline	3600	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthene	1800	ug/kg	10.0	U	R	No	S3VE
2,4-Dinitrophenol	3600	ug/kg	10.0	U	U	Yes	S3VE
4-Nitrophenol	3600	ug/kg	10.0	U	U	Yes	S3VE
Dibenzofuran	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	1800	ug/kg	10.0	U	U	Yes	S3VE
Diethylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Fluorene	1800	ug/kg	10.0	U	R	No	S3VE
4-Chlorophenylphenylether	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Nitroaniline	3600	ug/kg	10.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	3600	ug/kg	10.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	1800	ug/kg	10.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Bromophenylphenylether	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachlorobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
Atrazine	1800	ug/kg	10.0	U	U	Yes	S3VE
Pentachlorophenol	3600	ug/kg	10.0	U	R	No	S3VE
Phenanthrene	1800	ug/kg	10.0	U	R	No	S3VE
Anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Carbazole	1800	ug/kg	10.0	U	U	Yes	S3VE
Di-n-butylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Fluoranthene	1800	ug/kg	10.0	U	R	No	S3VE
Pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Butylbenzylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	1800	ug/kg	10.0	U	U	Yes	S3VE
Benzo(a)anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Chrysene	1800	ug/kg	10.0	U	R	No	S3VE
Bis(2-ethylhexyl)	1800 ³²⁰ _{mw}	ug/kg	10.0	J	U ^Q _{mw}	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1800 320	ug/kg	10.0	J	U- <i>Qmu</i>	Yes	S3VE
Di-n-octylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(k)fluoranthene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(a)pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(g,h,i)perylene	1800	ug/kg	10.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ3	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214532	pH:	8.9	Sample Date:	05232012	Sample Time:	10:25:00
% Moisture :	7.44			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	36	ug/kg	10.0	U	U	Yes	S3VE
2-Methylnaphthalene	36	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthylene	36	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthene	36	ug/kg	10.0	U	U	Yes	S3VE
Fluorene	36	ug/kg	10.0	U	U	Yes	S3VE
Pentachlorophenol	64	ug/kg	10.0	J	J <i>Qmu</i>	Yes	S3VE
Phenanthrene	36	ug/kg	10.0	U	U	Yes	S3VE
Anthracene	36	ug/kg	10.0	U	U	Yes	S3VE
Fluoranthene	12	ug/kg	10.0	J	J <i>Qmu</i>	Yes	S3VE
Pyrene	13	ug/kg	10.0	J	J <i>Qmu</i>	Yes	S3VE
Benzo(a)anthracene	36	ug/kg	10.0	U	U	Yes	S3VE
Chrysene	36	ug/kg	10.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	36	ug/kg	10.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	36	ug/kg	10.0	U	U	Yes	S3VE
Benzo(a)pyrene	36	ug/kg	10.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	36	ug/kg	10.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	36	ug/kg	10.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	36	ug/kg	10.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ4	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214533	pH:	8.8	Sample Date:	05232012	Sample Time:	10:30:00
% Moisture :	6.31			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
Phenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	180	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	19	ug/kg	1.0	J	JQ	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	350	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	350	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	180	ug/kg	1.0	U	R	No	S3VE
Anthracene	180	ug/kg	1.0	U	R	No	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	180 77 m	ug/kg	1.0	J	U + Q	Yes	S3VE
Fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Pyrene	180	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	18	ug/kg	1.0	J	JQ	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Chrysene	180	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	180 47 m	ug/kg	1.0	J	U + Q	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	180 ⁴⁷ <i>mw</i>	ug/kg	1.0	J	<i>U + Q mw</i>	Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	180	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Hexanoic acid, 2-ethyl-			1.0	JN		Yes	S3VE
Hexanedioic acid, bis(2-eth...			1.0	JN		Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ4	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214533	pH:	8.8	Sample Date:	05232012	Sample Time:	10:30:00
% Moisture:	6.31			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ4	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214533	pH:	8.8	Sample Date:	05232012	Sample Time:	10:30:00
% Moisture :	6.31			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	5.1	ug/kg	1.0	J	J <i>QML</i>	Yes	S3VE
Phenanthrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	3.5	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ4	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214533	pH:		Sample Date:	05232012	Sample Time:	10:30:00
% Moisture :	6.31	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	96	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.6	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.8	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclotetrasiloxane, octamet...			1.0	JN	R	No	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWQ6	Method: BNA_SIM	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214535	pH: 8.5	Sample Date: 05232012	Sample Time: 14:14:00
% Moisture: 7.47	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	35	ug/kg	10.0	U	U	Yes	S3VE
2-Methylnaphthalene	35	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthylene	64	ug/kg	10.0			Yes	S3VE
Acenaphthene	20	ug/kg	10.0	J	JQme	Yes	S3VE
Fluorene	71	ug/kg	10.0			Yes	S3VE
Pentachlorophenol	9.5	ug/kg	10.0	J	JQme	Yes	S3VE
Phenanthrene	330	ug/kg	10.0		JQme	Yes	S3VE
Anthracene	120	ug/kg	10.0			Yes	S3VE
Fluoranthene	300	ug/kg	10.0			Yes	S3VE
Pyrene	300	ug/kg	10.0			Yes	S3VE
Benzo(a)anthracene	130	ug/kg	10.0			Yes	S3VE
Chrysene	130	ug/kg	10.0			Yes	S3VE
Benzo(b)fluoranthene	110	ug/kg	10.0			Yes	S3VE
Benzo(k)fluoranthene	84	ug/kg	10.0			Yes	S3VE
Benzo(a)pyrene	120	ug/kg	10.0			Yes	S3VE
Indeno(1,2,3-cd)pyrene	90	ug/kg	10.0			Yes	S3VE
Dibenzo(a,h)anthracene	35	ug/kg	10.0	J	JQme	Yes	S3VE
Benzo(g,h,i)perylene	110	ug/kg	10.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ6	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214535	pH:	8.5	Sample Date:	05232012	Sample Time:	14:14:00
% Moisture:	7.47			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ6	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214535	pH:		Sample Date:	05232012	Sample Time:	14:14:00
% Moisture :	7.47	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.0	ug/kg	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.0	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	5.0	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.0	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.0	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.0	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,1,1,2-Tetrachloroethane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.0	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ6	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214535	pH:	8.5	Sample Date:	05232012	Sample Time:	14:14:00
% Moisture :	7.47			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	1800	ug/kg	10.0	U	U	Yes	S3VE
Phenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Chlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	1800	ug/kg	10.0	U	U	Yes	S3VE
Acetophenone	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachloroethane	1800	ug/kg	10.0	U	U	Yes	S3VE
Nitrobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
Isophorone	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Nitrophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dimethylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
Naphthalene	1800	ug/kg	10.0	U	R	No	S3VE
4-Chloroaniline	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachlorobutadiene	1800	ug/kg	10.0	U	U	Yes	S3VE
Caprolactam	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Methylnaphthalene	1800	ug/kg	10.0	U	R	No	S3VE
Hexachlorocyclopentadiene	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE
1,1'-Biphenyl	1800	ug/kg	10.0	U	U	Yes	S3VE
2-Chloronaphthalene	1800	ug/kg	10.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	3500	ug/kg	10.0	U	U	Yes	S3VE
Dimethylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	1800	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthylene	1800	ug/kg	10.0	U	R	No	S3VE
3-Nitroaniline	3500	ug/kg	10.0	U	U	Yes	S3VE
Acenaphthene	1800	ug/kg	10.0	U	R	No	S3VE
2,4-Dinitrophenol	3500	ug/kg	10.0	U	U	Yes	S3VE
4-Nitrophenol	3500	ug/kg	10.0	U	U	Yes	S3VE
Dibenzofuran	1800	ug/kg	10.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	1800	ug/kg	10.0	U	U	Yes	S3VE
Diethylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Fluorene	1800	ug/kg	10.0	U	R	No	S3VE
4-Chlorophenylphenylether	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Nitroaniline	3500	ug/kg	10.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	3500	ug/kg	10.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	1800	ug/kg	10.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
4-Bromophenylphenylether	1800	ug/kg	10.0	U	U	Yes	S3VE
Hexachlorobenzene	1800	ug/kg	10.0	U	U	Yes	S3VE
Atrazine	1800	ug/kg	10.0	U	U	Yes	S3VE
Pentachlorophenol	3500	ug/kg	10.0	U	R	No	S3VE
Phenanthrene	350	ug/kg	10.0	J	R	No	S3VE
Anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Carbazole	1800	ug/kg	10.0	U	U	Yes	S3VE
Di-n-butylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Fluoranthene	290	ug/kg	10.0	J	R	No	S3VE
Pyrene	270	ug/kg	10.0	J	R	No	S3VE
Butylbenzylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	1800	ug/kg	10.0	U	U	Yes	S3VE
Benzo(a)anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Chrysene	1800	ug/kg	10.0	U	R	No	S3VE
Bis(2-ethylhexyl)	1800-360 <i>mm</i>	ug/kg	10.0	J	<i>U + J</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1800-360 <i>mw</i>	ug/kg	10.0	J	<i>U-R</i>	Yes	S3VE
Di-n-octylphthalate	1800	ug/kg	10.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	130	ug/kg	10.0	J	R	No	S3VE
Benzo(k)fluorant hene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(a)pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	1800	ug/kg	10.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	1800	ug/kg	10.0	U	R	No	S3VE
Benzo(g,h,i)perylene	1800	ug/kg	10.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	1800	ug/kg	10.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ7	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214536	pH:	8.3	Sample Date:	05232012	Sample Time:	14:26:00
% Moisture :	6.97			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
Phenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	180	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	350	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	350	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	180	ug/kg	1.0	U	R	No	S3VE
Anthracene	180	ug/kg	1.0	U	R	No	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	180 ¹⁸⁰ ₁₉ ^m	ug/kg	1.0	J	U ^U _Q ^m	Yes	S3VE
Fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Pyrene	180	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Chrysene	180	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	340 ³⁴⁰ ₃₄₀ ^m	ug/kg	1.0		U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	340	ug/kg	1.0		U	Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	180	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1-(Methylamino)an			1.0	JN	JN	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE
Ethane, 1,1,2-trichloro-			1.0	JN	R	No	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ7	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214536	pH:	8.3	Sample Date:	05232012	Sample Time:	14:26:00
% Moisture :	6.97			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	7.1	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	5.3	ug/kg	1.0			Yes	S3VE
Anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	6.0	ug/kg	1.0			Yes	S3VE
Pyrene	11	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	4.6	ug/kg	1.0			Yes	S3VE
Chrysene	7.7	ug/kg	1.0			Yes	S3VE
Benzo(b)fluoranthene	7.7	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	3.3	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Benzo(a)pyrene	5.9	ug/kg	1.0			Yes	S3VE
Indeno(1,2,3-cd)pyrene	5.4	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	2.5	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Benzo(g,h,i)perylene	9.7	ug/kg	1.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ7	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214536	pH:		Sample Date:	05232012	Sample Time:	14:26:00
% Moisture :	6.97			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.9	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.9	ug/kg	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.9	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	98	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	4.9	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.9	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.9	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.9	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.9	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ7	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214536	pH:	8.3	Sample Date:	05232012	Sample Time:	14:26:00
% Moisture :	6.97			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ8	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214537	pH:	8.2	Sample Date:	05232012	Sample Time:	14:45:00
% Moisture:	10.41			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	37	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	37	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ8	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214537	pH:	8.2	Sample Date:	05232012	Sample Time:	14:45:00
% Moisture :	10.41			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.7	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.7	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.7	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	3.7	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.7	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	7.5	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	5.0	ug/kg	1.0		J	Yes	S3VE
Anthracene	3.7	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	3.7	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Pyrene	9.4	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	4.4	ug/kg	1.0			Yes	S3VE
Chrysene	8.9	ug/kg	1.0			Yes	S3VE
Benzo(b)fluoranthene	8.9	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	3.8	ug/kg	1.0			Yes	S3VE
Benzo(a)pyrene	6.2	ug/kg	1.0			Yes	S3VE
Indeno(1,2,3-cd)pyrene	9.2	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	4.5	ug/kg	1.0			Yes	S3VE
Benzo(g,h,i)perylene	18	ug/kg	1.0			Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWQ8	Method: BNA	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214537	pH: 8.2	Sample Date: 05232012	Sample Time: 14:45:00
% Moisture: 10.41		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	ug/kg	1.0	U	U	Yes	S3VE
Phenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	190	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	190	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	190	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	190	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	190	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	190	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	370	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	190	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	370	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	190	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	370	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	370	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	190	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	370	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	370	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	190	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	190	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	370	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	190	ug/kg	1.0	U	R	No	S3VE
Anthracene	190	ug/kg	1.0	U	R	No	S3VE
Carbazole	190	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	190 <i>57 m</i>	ug/kg	1.0	J	<i>U + Q MW</i>	Yes	S3VE
Fluoranthene	190	ug/kg	1.0	U	R	No	S3VE
Pyrene	190	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Chrysene	190	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	620	ug/kg	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	620	ug/kg	1.0			Yes	S3VE
Di-n-octylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	190	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Tridecanoic acid			1.0	JN	JN	Yes	S3VE
3-Buten-2-one, 3-methyl-			1.0	JN	JN	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN	R	No	S3VE
1-Octadecanol			1.0	JN	JN	Yes	S3VE
Ethane, 1,1,2-trichloro-			1.0	JN	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWQ8	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214537	pH:		Sample Date:	05232012	Sample Time:	14:45:00
% Moisture :	10.41	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.1	ug/kg	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	5.1	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.1	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.1	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWRO	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214539	pH:		Sample Date:	05242012	Sample Time:	09:28:00
% Moisture :	8.15	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.4	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.4	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	94	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	4.7	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.7	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.4	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.7	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.4	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.7	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.7	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWR0	Method: BNA	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214539	pH: 8.6	Sample Date: 05242012	Sample Time: 09:28:00
% Moisture: 8.15		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
Phenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	180	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	21	ug/kg	1.0	J	J <i>Qmu</i>	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	360	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	180	ug/kg	1.0	U	R	No	S3VE
Anthracene	180	ug/kg	1.0	U	R	No	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	180 <i>74 m</i>	ug/kg	1.0	J	U <i>Qmu</i>	Yes	S3VE
Fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Pyrene	180	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	15	ug/kg	1.0	J	J <i>Qmu</i>	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Chrysene	180	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	180 <i>57 m</i>	ug/kg	1.0	J	U <i>Qmu</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	180 ⁵⁷ <i>me</i>	ug/kg	1.0	J	<i>U + Qmu</i>	Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	180	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN	R	No	S3VE
Butanoic acid, butyl ester			1.0	JN	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWR0	Method: Aroclor	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214539	pH: 8.6	Sample Date: 05242012	Sample Time: 09:28:00
% Moisture : 8.15	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWR0	Method: BNA_SIM	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214539	pH: 8.6	Sample Date: 05242012	Sample Time: 09:28:00
% Moisture: 8.15		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	7.2	ug/kg	1.0	U	R	Yes	S3VE
Phenanthrene	3.5	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Anthracene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	4.0	ug/kg	1.0			Yes	S3VE
Pyrene	7.8	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	4.8	ug/kg	1.0			Yes	S3VE
Chrysene	3.3	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Benzo(b)fluoranthene	5.2	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	3.1	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Benzo(a)pyrene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	3.6	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214541	pH:		Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.1	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.1	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.1	ug/kg	1.0	U	UJ	Yes	S3VE
1,3-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.1	ug/kg	1.0	U	UJ	Yes	S3VE
1,2,4-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214541	pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214541	pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	7.0	ug/kg	1.0	U	R	Yes	S3VE
Phenanthrene	3.1	ug/kg	1.0	J	J <i>Qmc</i>	Yes	S3VE
Anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	2.6	ug/kg	1.0	J	J <i>Qmc</i>	Yes	S3VE
Pyrene	5.0	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	3.5	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214541	pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
Phenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	180	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	21	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	350	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	350	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	180	ug/kg	1.0	U	R	No	S3VE
Anthracene	180	ug/kg	1.0	U	R	No	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	180 <i>82</i>	ug/kg	1.0	J	U <i>Qm</i>	Yes	S3VE
Fluoranthene	180	ug/kg	1.0	U	R	No	S3VE
Pyrene	180	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	21	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Chrysene	180	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	180 <i>42</i>	ug/kg	1.0	J	U <i>Qm</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	180	ug/kg	1.0	J	U	Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,l)perylene	180	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN	R	No	S3VE
Hexanedioic acid, bis(2-eth...			1.0	JN	JN	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWR2MS	Method: BNA_SIM	Matrix: Soil	MA Number: DEFAULT
Sample Location:	pH: 8.0	Sample Date: 05242012	Sample Time: 10:05:00
% Moisture: 5.89		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Acenaphthene	23	ug/kg	1.0			Yes	S3VE
Naphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophen ol	38	ug/kg	1.0	E	J	Yes	S3VE
2- Methylnaphthale ne	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pyrene	19	ug/kg	1.0			Yes	S3VE
Acenaphthylene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthrac ene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluorant hene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3- cd)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anth racene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,l)per ylene	3.5	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2MS	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214541	pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
Phenol	860	ug/kg	1.0			Yes	S3VE
2-Chlorophenol	870	ug/kg	1.0			Yes	S3VE
N-Nitroso-di-n-propylamine	1200	ug/kg	1.0			Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	860	ug/kg	1.0			Yes	S3VE
Acenaphthene	1100	ug/kg	1.0			Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	990	ug/kg	1.0			Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	1200	ug/kg	1.0			Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	940	ug/kg	1.0			Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Pyrene	910	ug/kg	1.0			Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	U	Yes	S3VE
3-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	31	ug/kg	1.0	J	J <i>QAC</i>	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	350	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	180	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	120	ug/kg	1.0	J	J	Yes	S3VE
Fluoranthene	180	ug/kg	1.0	U	U	Yes	S3VE
Butylbenzylphthalate	26	ug/kg	1.0	J	J	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-ethylhexyl)	55	ug/kg	1.0	J	J	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	55	ug/kg	1.0	J	J	Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluorant hene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,I)perylene	180	ug/kg	1.0	U	U	Yes	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2MS	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	140	ug/kg	1.0			Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	110	ug/kg	1.0			Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2MSD	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214541	pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	850	ug/kg	1.0			Yes	S3VE
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	860	ug/kg	1.0			Yes	S3VE
N-Nitroso-di-n-propylamine	1200	ug/kg	1.0			Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	890	ug/kg	1.0			Yes	S3VE
Acenaphthene	1100	ug/kg	1.0			Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	1000	ug/kg	1.0			Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	1200	ug/kg	1.0			Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	860	ug/kg	1.0			Yes	S3VE
Pyrene	910	ug/kg	1.0			Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	U	Yes	S3VE
3-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrophenol	350	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	22	ug/kg	1.0	J	J	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	350	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	350	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	180	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	87	ug/kg	1.0	J	J	Yes	S3VE
Fluoranthene	180	ug/kg	1.0	U	U	Yes	S3VE
Butylbenzylphthalate	19	ug/kg	1.0	J	J	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-ethylhexyl)	70	ug/kg	1.0	J	J	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	70	ug/kg	1.0	J	J	Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	180	ug/kg	1.0	U	U	Yes	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2MSD	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	130	ug/kg	1.0			Yes	S3VE
Aroclor-1260	120	ug/kg	1.0			Yes	S3VE
Aroclor-1221	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	35	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	35	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWR2MSD	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.0	Sample Date:	05242012	Sample Time:	10:05:00
% Moisture :	5.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Acenaphthene	24	ug/kg	1.0			Yes	S3VE
Naphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	47	ug/kg	1.0	E	J	Yes	S3VE
2-Methylnaphthalene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Pyrene	20	ug/kg	1.0			Yes	S3VE
Acenaphthylene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	3.5	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.87	ug/kg	1.0	J	J	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ3	Lab Code: A4
Sample Number: JRWS1	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214550	pH:	Sample Date: 05222012	Sample Time: 11:15:00
% Moisture: 9.33		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.3	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Acetone	11	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.3	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.3	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.3	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	5.3	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.3	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	11	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.3	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	110	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.3	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	5.3	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.3	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	11	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.3	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	11	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.3	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.3	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.3	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.3	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.3	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.3	ug/kg	1.0	U	UJ	Yes	S3VE
1,3-Dichlorobenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.3	ug/kg	1.0	U	UJ	Yes	S3VE
1,2,4-Trichlorobenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.3	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWS2	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214551	pH:		Sample Date:	05222012	Sample Time:	14:45:00
% Moisture :	12.23	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.1	ug/kg	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.1	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.1	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Benzene, 1,3,5-trimethyl-			1.0	JN	JN	Yes	S3VE
1H-Indene, 2,3-dihydro-5-me...			1.0	JN	JN	Yes	S3VE
Benzene, 1-ethyl-2,4-dimethyl-			1.0	JN	JN	Yes	S3VE
Benzene, 1,2,3,5-tetramethyl-			1.0	JN	JN	Yes	S3VE
Benzene, (2-methyl-1-propen...			1.0	JN	JN	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzene, 2-ethyl-1,4-dimethyl-			1.0	JN	JN	Yes	S3VE
Benzene, 1-methyl-3-(1-meth...			1.0	JN	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ3	Lab Code:	A4
Sample Number:	JRWS3	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214552	pH:		Sample Date:	05222012	Sample Time:	15:00:00
% Moisture :	8.65	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.6	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.3	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.6	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.6	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.6	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.6	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.6	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.3	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.6	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	93	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.6	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	4.6	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.6	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.3	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.6	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	4.6	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.3	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.6	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.6	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.6	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.6	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.6	ug/kg	1.0	U	U	Yes	S3VE

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ3 Case 42569 Contract EPW10018 Region 10 DDTID 153654 SOW SOM01.2

Analytical Sample Listing

VOA_Low_Med

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ2	Field_Sample	Soil	Low	05232012 10:15:00	05302012 10:17:00			06052012 11:21:00	DB-624	C-5973
JRWQ2MS	Matrix_Spike	Soil	Low	05232012 10:15:00	05302012 10:17:00			06042012 17:49:00	DB-624	C-5973
JRWQ2MSD	Matrix_Spike_Duplicate	Soil	Low	05232012 10:15:00	05302012 10:17:00			06042012 18:16:00	DB-624	C-5973
JRWQ3	Field_Sample	Soil	Low	05232012 10:25:00	05252012 09:25:00			06022012 21:03:00	DB-624	C-5973
JRWQ4	Field_Sample	Soil	Low	05232012 10:30:00	05252012 09:25:00			06022012 21:30:00	DB-624	C-5973
JRWQ6	Field_Sample	Soil	Low	05232012 14:14:00	05302012 10:17:00			06042012 18:42:00	DB-624	C-5973
JRWQ7	Field_Sample	Soil	Low	05232012 14:26:00	05302012 10:17:00			06042012 19:08:00	DB-624	C-5973
JRWQ8	Field_Sample	Soil	Low	05232012 14:45:00	05302012 10:17:00			06042012 19:34:00	DB-624	C-5973
JRWR0	Field_Sample	Soil	Low	05242012 09:28:00	05252012 09:25:00			06022012 21:56:00	DB-624	C-5973
JRWR2	Field_Sample	Soil	Low	05242012 10:05:00	05252012 09:25:00			06022012 22:22:00	DB-624	C-5973
JRWS1	Field_Sample	Soil	Low	05222012 11:15:00	05252012 09:25:00			06022012 22:48:00	DB-624	C-5973
JRWS2	Field_Sample	Soil	Low	05222012 14:45:00	05252012 09:25:00			06022012 23:15:00	DB-624	C-5973
JRWS3	Field_Sample	Soil	Low	05222012 15:00:00	05252012 09:25:00			06022012 23:41:00	DB-624	C-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ3 Case 42569 Contract EPW10018 Region 10 DDTID 153654 SOW SOM01.2

Analytical Sample Listing

BNA

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ2	Field_Sample	Soil	Low	05232012 10:15:00	05302012 10:17:00	Sonication	06042012 09:00:00	06082012 12:25:00	HP-5MS	E-5973
JRWQ3	Field_Sample	Soil	Low	05232012 10:25:00	05252012 09:25:00	Sonication	05302012 10:30:00	05312012 17:21:00	HP-5MS	E-5973
JRWQ4	Field_Sample	Soil	Low	05232012 10:30:00	05252012 09:25:00	Sonication	05302012 10:30:00	05312012 17:52:00	HP-5MS	E-5973
JRWQ6	Field_Sample	Soil	Low	05232012 14:14:00	05302012 10:17:00	Sonication	06042012 09:00:00	06082012 12:56:00	HP-5MS	E-5973
JRWQ7	Field_Sample	Soil	Low	05232012 14:26:00	05302012 10:17:00	Sonication	06042012 09:00:00	06132012 12:58:00	HP-5MS	G-5973
JRWQ8	Field_Sample	Soil	Low	05232012 14:45:00	05302012 10:17:00	Sonication	06042012 09:00:00	06132012 13:29:00	HP-5MS	G-5973
JRWR0	Field_Sample	Soil	Low	05242012 09:28:00	05252012 09:25:00	Sonication	05302012 10:30:00	05312012 18:23:00	HP-5MS	E-5973
JRWR2	Field_Sample	Soil	Low	05242012 10:05:00	05252012 09:25:00	Sonication	05302012 10:30:00	05312012 18:54:00	HP-5MS	E-5973
JRWR2MS	Matrix_Spike	Soil	Low	05242012 10:05:00	05252012 09:25:00	Sonication	05302012 10:30:00	05312012 19:25:00	HP-5MS	E-5973
JRWR2MSD	Matrix_Spike_Duplicate	Soil	Low	05242012 10:05:00	05252012 09:25:00	Sonication	05302012 10:30:00	05312012 19:57:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ3 Case 42569 Contract EPW10018 Region 10 DDTID 153654 SOW SOM01.2

Analytical Sample Listing

BNA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ2	Field_Sample	Soil		05232012 10:15:00	05302012 10:17:00	Sonication	06042012 09:00:00	06132012 16:46:00	HP-5MS	E-5973
JRWQ3	Field_Sample	Soil		05232012 10:25:00	05252012 09:25:00	Sonication	05302012 10:30:00	06012012 17:50:00	HP-5MS	E-5973
JRWQ4	Field_Sample	Soil		05232012 10:30:00	05252012 09:25:00	Sonication	05302012 10:30:00	06012012 18:21:00	HP-5MS	E-5973
JRWQ6	Field_Sample	Soil		05232012 14:14:00	05302012 10:17:00	Sonication	06042012 09:00:00	06132012 17:17:00	HP-5MS	E-5973
JRWQ7	Field_Sample	Soil		05232012 14:26:00	05302012 10:17:00	Sonication	06042012 09:00:00	06142012 07:56:00	HP-5MS	E-5973
JRWQ8	Field_Sample	Soil		05232012 14:45:00	05302012 10:17:00	Sonication	06042012 09:00:00	06132012 19:22:00	HP-5MS	E-5973
JRWR0	Field_Sample	Soil		05242012 09:28:00	05252012 09:25:00	Sonication	05302012 10:30:00	06012012 18:53:00	HP-5MS	E-5973
JRWR2	Field_Sample	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	05302012 10:30:00	06012012 17:19:00	HP-5MS	E-5973
JRWR2MS	Matrix_Spike	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	05302012 10:30:00	06012012 19:55:00	HP-5MS	E-5973
JRWR2MSD	Matrix_Spike_Duplicate	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	05302012 10:30:00	06012012 20:26:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ3 Case 42569 Contract EPW10018 Region 10 DDTID 153654 SOW SOM01.2

Analytical Sample Listing

Aroclor

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ2	Field_Sample	Soil		05232012 10:15:00	05302012 10:17:00	Sonication	06032012 08:30:00	06062012 23:46:00	DB-XLB	F-6890A
JRWQ2	Field_Sample	Soil		05232012 10:15:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 00:16:00	DB-35MS	F-6890B
JRWQ3	Field_Sample	Soil		05232012 10:25:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 21:47:12	DB-XLB	F-6890A
JRWQ3	Field_Sample	Soil		05232012 10:25:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 22:17:00	DB-35MS	F-6890B
JRWQ4	Field_Sample	Soil		05232012 10:30:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 22:17:00	DB-XLB	F-6890A
JRWQ4	Field_Sample	Soil		05232012 10:30:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 22:46:00	DB-35MS	F-6890B
JRWQ6	Field_Sample	Soil		05232012 14:14:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 00:16:00	DB-XLB	F-6890A
JRWQ6	Field_Sample	Soil		05232012 14:14:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 00:46:00	DB-35MS	F-6890B
JRWQ7	Field_Sample	Soil		05232012 14:26:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 00:46:00	DB-XLB	F-6890A
JRWQ7	Field_Sample	Soil		05232012 14:26:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 01:16:05	DB-35MS	F-6890B
JRWQ8	Field_Sample	Soil		05232012 14:45:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 10:45:00	DB-XLB	F-6890A
JRWQ8	Field_Sample	Soil		05232012 14:45:00	05302012 10:17:00	Sonication	06032012 08:30:00	06072012 11:15:00	DB-35MS	F-6890B
JRWR0	Field_Sample	Soil		05242012 09:28:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 22:46:00	DB-XLB	F-6890A
JRWR0	Field_Sample	Soil		05242012 09:28:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 23:16:00	DB-35MS	F-6890B
JRWR2	Field_Sample	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 23:16:00	DB-XLB	F-6890A
JRWR2	Field_Sample	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 23:46:00	DB-35MS	F-6890B
JRWR2MS	Matrix_Spike	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	06032012 08:30:00	06072012 11:15:00	DB-XLB	F-6890A
JRWR2MS	Matrix_Spike	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	06032012 08:30:00	06072012 11:45:00	DB-35MS	F-6890B
JRWR2MSD	Matrix_Spike_Duplicate	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	06032012 08:30:00	06072012 11:45:00	DB-XLB	F-6890A
JRWR2MSD	Matrix_Spike_Duplicate	Soil		05242012 10:05:00	05252012 09:25:00	Sonication	06032012 08:30:00	06072012 12:15:00	DB-35MS	F-6890B

Edit History Report

Case No: 42569

Contract: EPW10018

SDG No: JRWQ3

Lab Code: A4

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ2	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Phenanthrene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:12 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ2	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:12 AM	
JRWQ2	Soil	Total Alkane TICs	Validation Flag		JN	Donald Brown	6/28/12 11:12 AM	
JRWQ3	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Phenanthrene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:15 AM	
JRWQ3	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:15 AM	
JRWQ4	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ4	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Ethane, 1,1,2,2-tetrachloro-	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Ethane, 1,1,2,2-tetrachloro-	Validation Flag		R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Phenanthrene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:18 AM	
JRWQ4	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:18 AM	
JRWQ6	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ6	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(b)fluoranthene	Validation Flag	J	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:22 AM	
JRWQ6	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:22 AM	
JRWQ6	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Fluoranthene	Validation Flag	J	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Phenanthrene	Validation Flag	J	R	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:20 AM	
JRWQ6	Soil	Pyrene	Validation Flag	J	R	Donald Brown	6/28/12 11:20 AM	
JRWQ7	Soil	1-(Methylamino)an	Validation Flag		JN	Donald Brown	6/28/12 11:30 AM	
JRWQ7	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ7	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Ethane, 1,1,2,2-tetrachloro-	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Ethane, 1,1,2,2-tetrachloro-	Validation Flag		R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Ethane, 1,1,2-trichloro-	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Ethane, 1,1,2-trichloro-	Validation Flag		R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Phenanthrene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:28 AM	
JRWQ7	Soil	Total Alkane TICs	Validation Flag		JN	Donald Brown	6/28/12 11:30 AM	
JRWQ8	Soil	1-Octadecanol	Validation Flag		JN	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ8	Soil	ne	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	3-Buten-2-one, 3-methyl-	Validation Flag		JN	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Ethane, 1,1,2,2-tetrachloro-	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Ethane, 1,1,2,2-tetrachloro-	Validation Flag		R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Ethane, 1,1,2-trichloro-	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Ethane, 1,1,2-trichloro-	Validation Flag		R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Phenanthrene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Total Alkane	Validation		JN	Donald	6/28/12 11:32 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ8	Soil	TICs	Flag		JN	Brown	6/28/12 11:32 AM	
JRWQ8	Soil	Tridecanoic acid	Validation Flag		JN	Donald Brown	6/28/12 11:32 AM	
JRWR0	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Butanoic acid, butyl ester	Validation Flag		JN	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Ethane, 1,1,2,2-tetrachloro-	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Ethane, 1,1,2,2-tetrachloro-	Validation Flag		R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Phenanthrene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Pyrene	Reportable	Y	N	Donald	6/28/12 11:36 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWR0	Soil	Pyrene	Reportable	Y	N	Brown	6/28/12 11:36 AM	
JRWR0	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:36 AM	
JRWR0	Soil	Total Alkane TICs	Validation Flag		JN	Donald Brown	6/28/12 11:36 AM	
JRWR2	Soil	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Acenaphthene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Acenaphthene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Acenaphthylene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Acenaphthylene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Chrysene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Chrysene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Ethane, 1,1,2,2-tetrachloro-	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Ethane, 1,1,2,2-tetrachloro-	Validation Flag		R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Fluoranthene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Fluoranthene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Fluorene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Fluorene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Hexanedioic acid, bis(2-eth...	Validation Flag		JN	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Naphthalene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Naphthalene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Pentachlorophenol	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Pentachlorophenol	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Phenanthrene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Phenanthrene	Validation	U	R	Donald	6/28/12 11:40 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWR2	Soil	Phenanthrene	Flag	U	R	Brown	6/28/12 11:40 AM	
JRWR2	Soil	Pyrene	Reportable	Y	N	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Pyrene	Validation Flag	U	R	Donald Brown	6/28/12 11:40 AM	
JRWR2	Soil	Total Alkane TICs	Validation Flag		JN	Donald Brown	6/28/12 11:40 AM	

Method: VOA_Low_Med

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ4	Soil	Cyclotrasiloxane, octamet...	Reportable	Y	N	Donald Brown	6/26/12 7:06 PM	
JRWQ4	Soil	Cyclotrasiloxane, octamet...	Validation Flag		R	Donald Brown	6/26/12 7:06 PM	
JRWS2	Soil	1H-Indene, 2,3-dihydro-5-me...	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	
JRWS2	Soil	Benzene, (2-methyl-1-propen...	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	
JRWS2	Soil	Benzene, 1,2,3,5-tetramethyl-	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	
JRWS2	Soil	Benzene, 1,3,5-trimethyl-	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	
JRWS2	Soil	Benzene, 1-ethyl-2,4-dimethyl-	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	
JRWS2	Soil	Benzene, 1-methyl-3-(1-meth...	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	
JRWS2	Soil	Benzene, 2-ethyl-1,4-dimethyl-	Validation Flag		JN	Donald Brown	6/26/12 7:16 PM	



ecology and environment, inc.

Global Environmental Specialists

720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 28, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 19 soil samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs) by Selective Ion Monitoring (SIM), chlorinated pesticides, and polychlorinated biphenyls (CLP SOW SOM01.2) were performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

JRWM1	JRWM2	JRWM3	JRWM6	JRWM7	JRWM8
JRWN1	JRWN2	JRWN3	JRWN6	JRWN7	JRWN8
JRWP1	JRWP2	JRWP3	JRWR1	JRWS1	JRWS2
JRWS3					

The original data memo listed an incorrect total number of samples; this discrepancy was corrected in a resubmission by the original reviewer. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.

The di-n-butyl phthalate and bis(2-ethylhexyl)phthalate results in sample JRWR1 were qualified as not detected (U) based on associated rinsate blank contamination.



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

Date: June 27, 2012

Reply to:
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Volatile, Semivolatile Organic (SVOC / SIM), pesticide, and Aroclor analyses of soil samples collected from the Jefferson Avenue Site
Case Number: 42569 SDG: JRWM1

From: Raymond Wu, QA Chemist  7/9/12
Office of Environmental Assessment (OEA - 095), USEPA Region 10

To: Joanne Labaw, EPA Task Monitor
Office of Environmental Clean-up (ECL-112), USEPA Region 10

CC: Renee Nordeen, START-3 Project Leader
Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of nineteen soil samples collected from the above referenced site has been completed. These samples were analyzed for VOC, SVOC/SIM, pesticide, or PCBs in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2) by A4 Scientific, Inc., located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 3 Data Validation Electronic Process (S3VE). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Jefferson Avenue (@ Tacoma, WA) dated June 2012, the technical specifications of USEPA CLP SOW for Organic Data Review, the Contract Laboratory Program's National Functional Guidelines for Organic Data Review and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Sample Index Table found at the end of this report.

The conclusions presented herein are based on the information provided for the review.

I. QUALITY CONTROL RESULTS SUMMARY

Volatile Organic VOA Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N*	Non-detect or < 5X Blank [†]
Semivolatile Organic SVOC Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N*	Non-detect or < 5X Blank
Semivolatile Organic SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N*	Non-detect or < 5X Blank

*See the Electronic Data Review Results section below for outliers and qualification of affected data.

[†]10X Blank for ketones or solvents.

[‡]RRF < 0.01 for semivolatile target compounds exhibiting poor response (see Organic CLP NFGs Table 28).

(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference)

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Please find them in the “Sample Summary Report Section” of this report. (Note: In case of multiple runs for a semivolatile analysis, please also see sample summary report to determine which run the reviewer picked.)

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 that the analyte is present. The associated numerical result is an estimate.

Attachments:

Sample Summary Report
 Analytical Sample Listing (Report #6)

Sample Summary Report

Case No: 42569	Contract: EPW10018	SDG No: JRWM1	Lab Code: A4
Sample Number: JRWM1	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214500	pH:	Sample Date: 05212012	Sample Time: 08:30:00
% Moisture: 10.31		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	1.5	ug/kg	1.0	J	J	Yes	S3VE
Vinyl chloride	5.2	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.2	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.2	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.2	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	5.2	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.2	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.2	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.2	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Methylcyclohexane	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.2	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.2	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.2	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.2	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.2	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.2	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.2	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.2	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM1MS	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214500	pH:		Sample Date:	05212012	Sample Time:	08:30:00
% Moisture :	10.31			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	43	ug/kg	1.0			Yes	S3VE
Dichlorodifluoromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Benzene	50	ug/kg	1.0			Yes	S3VE
Trichloroethene	41	ug/kg	1.0			Yes	S3VE
Toluene	49	ug/kg	1.0			Yes	S3VE
Bromomethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	45	ug/kg	1.0			Yes	S3VE
Trichlorofluoromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Acetone	11	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.6	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.6	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.6	ug/kg	1.0	JB	U	Yes	S3VE
Methyl tert-butyl ether	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	11	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	110	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.6	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
4-Methyl-2-pentanone	11	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.6	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	11	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.6	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.6	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.6	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.6	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	5.6	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.6	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.6	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM1MSD	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214500	pH:		Sample Date:	05212012	Sample Time:	08:30:00
% Moisture :	10.31			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	45	ug/kg	1.0			Yes	S3VE
Dichlorodifluoro methane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Benzene	51	ug/kg	1.0			Yes	S3VE
Chloromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	44	ug/kg	1.0			Yes	S3VE
Toluene	49	ug/kg	1.0			Yes	S3VE
Bromomethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	45	ug/kg	1.0			Yes	S3VE
Trichlorofluorom ethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Acetone	11	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.6	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.6	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.6	ug/kg	1.0	JB	U	Yes	S3VE
Methyl tert-butyl ether	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	11	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	110	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom ethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.6	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
4-Methyl-2-pentanone	11	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.6	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	11	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.6	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.6	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.6	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.6	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.6	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	5.6	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.6	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	5.6	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM2	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214501	pH:		Sample Date:	05212012	Sample Time:	09:00:00
% Moisture :	10.41	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	1.4	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Vinyl chloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.1	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	5.1	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.1	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.1	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM3	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214502	pH:		Sample Date:	05212012	Sample Time:	09:30:00
% Moisture :	8.72	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	1.0	ug/kg	1.0	J	J <i>Qme</i>	Yes	S3VE
Vinyl chloride	4.9	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.9	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.9	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	98	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	4.9	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.9	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.9	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.8	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.9	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.9	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.9	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.9	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM6	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214505	pH:		Sample Date:	05212012	Sample Time:	11:02:00
% Moisture :	10.01			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	1.5	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Vinyl chloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Acetone	10	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	5.1	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	10	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.1	ug/kg	1.0	U	U	Yes	S3VE
Benzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	5.1	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	ug/kg	1.0	U	U	Yes	S3VE
Toluene	5.1	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	10	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Styrene	5.1	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	5.1	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.1	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM7	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214506	pH:		Sample Date:	05212012	Sample Time:	11:29:00
% Moisture:	6.99	% Solids:					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	1.3	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Vinyl chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.7	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.8	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.7	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	97	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	4.8	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.7	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.7	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.8	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWM8	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214507	pH:		Sample Date:	05212012	Sample Time:	11:53:00
% Moisture :	10.21	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.7	ug/kg	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	95	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom	4.7	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.7	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.7	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloromethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.7	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.7	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWN1	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214510	pH:	8.4	Sample Date:	05212012	Sample Time:	14:55:00
% Moisture :	13.86			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	2.0	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	2.0	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	2.0	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	2.0	ug/kg	1.0	JP	JP	Yes	S3VE
Methoxychlor	20	ug/kg	1.0	JP	U	Yes	S3VE
Endrin ketone	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.8	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	2.0	ug/kg	1.0			Yes	S3VE
gamma- Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	200	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWN1MS	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214510	pH:	8.4	Sample Date:	05212012	Sample Time:	14:55:00
% Moisture :	13.86			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	10	ug/kg	1.0			Yes	S3VE
Heptachlor	10	ug/kg	1.0	P	J	Yes	S3VE
beta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	8.8	ug/kg	1.0			Yes	S3VE
Dieldrin	20	ug/kg	1.0	P		Yes	S3VE
Endrin	23	ug/kg	1.0	P		Yes	S3VE
4,4'-DDT	21	ug/kg	1.0			Yes	S3VE
Heptachlor epoxide	2.0	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	2.0	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.8	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	13	ug/kg	1.0	JP	J	Yes	S3VE
Endrin ketone	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.8	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	2.0	ug/kg	1.0	P		Yes	S3VE
gamma- Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	200	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWMI	Lab Code:	A4
Sample Number:	JRWN1MSD	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214510	pH:	8.4	Sample Date:	05212012	Sample Time:	14:55:00
% Moisture :	13.86			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	15	ug/kg	1.0			Yes	S3VE
beta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	14	ug/kg	1.0	P	J	Yes	S3VE
Aldrin	12	ug/kg	1.0			Yes	S3VE
delta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	29	ug/kg	1.0			Yes	S3VE
Endrin	32	ug/kg	1.0			Yes	S3VE
4,4'-DDT	30	ug/kg	1.0			Yes	S3VE
Heptachlor epoxide	2.0	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	2.0	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.8	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	17	ug/kg	1.0	J	J	Yes	S3VE
Endrin ketone	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.8	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	2.4	ug/kg	1.0	P		Yes	S3VE
gamma- Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	200	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWN2	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214511	pH:	8.1	Sample Date:	05212012	Sample Time:	15:10:00
% Moisture :	9.48			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	1.9	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	1.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	1.9	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.6	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	19	ug/kg	1.0	U	U	Yes	S3VE
Endrin ketone	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.6	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	190	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWMI	Lab Code:	A4
Sample Number:	JRWN3	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214512	pH:	8.3	Sample Date:	05212012	Sample Time:	15:30:00
% Moisture :	12.39			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	1.9	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	1.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	1.9	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.7	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.7	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.7	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.7	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.7	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.7	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.7	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	220	ug/kg	1.0			Yes	S3VE
Endrin ketone	3.7	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.7	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	190	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWN6	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214515	pH:	8.4	Sample Date:	05212012	Sample Time:	15:45:00
% Moisture :	11.31			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	1.9	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	1.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	1.9	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.7	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.7	ug/kg	1.0	JP	U	Yes	S3VE
Endrin	3.7	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.7	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	2.8	ug/kg	1.0	JP	J <i>Qm</i>	Yes	S3VE
Endosulfan sulfate	3.7	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	2.0	ug/kg	1.0	JP	J <i>Qm</i>	Yes	S3VE
Methoxychlor	20	ug/kg	1.0			Yes	S3VE
Endrin ketone	1.9	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Endrin aldehyde	3.7	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	1.9	ug/kg	1.0	JP	U	Yes	S3VE
gamma- Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	190	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWN7	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214516	pH:	8.5	Sample Date:	05212012	Sample Time:	16:05:00
% Moisture :	13.89			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	2.0	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	2.0	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	2.0	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.8	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.8	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	49	ug/kg	1.0			Yes	S3VE
Endrin ketone	3.8	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.8	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	200	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWN8	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214517	pH:	8.4	Sample Date:	05212012	Sample Time:	16:25:00
% Moisture :	8.32			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	1.9	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	1.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	1.9	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.6	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	51	ug/kg	1.0			Yes	S3VE
Endrin ketone	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.6	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	190	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWP1	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214520	pH:	8.2	Sample Date:	05212012	Sample Time:	16:50:00
% Moisture :	16.00			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	2.0	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	2.0	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	2.0	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	2.0	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.9	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.9	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.9	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.9	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.9	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	20	ug/kg	1.0	U	U	Yes	S3VE
Endrin ketone	3.9	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.9	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	2.0	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	200	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWP2	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214521	pH:	8.3	Sample Date:	05212012	Sample Time:	17:10:00
% Moisture :	9.23			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	1.9	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	1.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	1.9	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.6	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	19	ug/kg	1.0	U	U	Yes	S3VE
Endrin ketone	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.6	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	190	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWMI	Lab Code:	A4
Sample Number:	JRWP3	Method:	Pest	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214522	pH:	8.2	Sample Date:	05212012	Sample Time:	17:30:00
% Moisture :	8.84			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
alpha-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
beta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
delta-BHC	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma-BHC (Lindane)	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor	1.9	ug/kg	1.0	U	U	Yes	S3VE
Aldrin	1.9	ug/kg	1.0	U	U	Yes	S3VE
Heptachlor epoxide	1.9	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan I	1.9	ug/kg	1.0	U	U	Yes	S3VE
Dieldrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDE	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan II	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDD	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endosulfan sulfate	3.6	ug/kg	1.0	U	U	Yes	S3VE
4,4'-DDT	3.6	ug/kg	1.0	U	U	Yes	S3VE
Methoxychlor	19	ug/kg	1.0	U	U	Yes	S3VE
Endrin ketone	3.6	ug/kg	1.0	U	U	Yes	S3VE
Endrin aldehyde	3.6	ug/kg	1.0	U	U	Yes	S3VE
alpha-Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
gamma- Chlordane	1.9	ug/kg	1.0	U	U	Yes	S3VE
Toxaphene	190	ug/kg	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWM1	Lab Code: A4
Sample Number: JRWR1	Method: BNA	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214540	pH: 8.6	Sample Date: 05242012	Sample Time: 09:42:00
% Moisture: 8.67		% Solids:	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	ug/kg	1.0	U	U	Yes	S3VE
Phenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	190	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	190	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	190	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	190	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	190	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	190	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	190	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	190	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	190	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	190	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	190	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	360	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	190	ug/kg	1.0	U	U	No	S3VE
Anthracene	190	ug/kg	1.0	U	R	No	S3VE
Carbazole	190	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	190 35 <i>mw</i>	ug/kg	1.0	J	U + <i>mw</i>	Yes	S3VE
Fluoranthene	190	ug/kg	1.0	U	R	No	S3VE
Pyrene	190	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Chrysene	190	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	190 130 <i>mw</i>	ug/kg	1.0	J	U + <i>mw</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	130	ug/kg	1.0	J	J <i>Q</i>	Yes	S3VE
Di-n-octylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	190	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN		Yes	S3VE
Total Alkane TICs			1.0	J		Yes	S3VE
Cyclic octatomic sulfur			1.0	JN		Yes	S3VE
Octadecanoic acid			1.0	JN		Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWM1	Lab Code: A4
Sample Number: JRWR1	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214540	pH:	Sample Date: 05242012	Sample Time: 09:42:00
% Moisture : 8.67		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromomethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Trichlorofluoromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Benzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	95	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromodichloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Toluene	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.8	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclotetrasiloxane, octamet...			1.0	JN		Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214540	pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture:	8.67			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214540	pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture:	8.67			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	4.6	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Phenanthrene	4.8	ug/kg	1.0			Yes	S3VE
Anthracene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	7.6	ug/kg	1.0			Yes	S3VE
Pyrene	10	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	8.6	ug/kg	1.0			Yes	S3VE
Chrysene	4.8	ug/kg	1.0		J Qm	Yes	S3VE
Benzo(b)fluoranthene	11	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	5.5	ug/kg	1.0			Yes	S3VE
Benzo(a)pyrene	8.3	ug/kg	1.0			Yes	S3VE
Indeno(1,2,3-cd)pyrene	8.5	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	3.7	ug/kg	1.0			Yes	S3VE
Benzo(g,h,i)perylene	12	ug/kg	1.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MS	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	ug/kg	1.0	U	U	Yes	S3VE
Phenol	670	ug/kg	1.0			Yes	S3VE
2-Chlorophenol	710	ug/kg	1.0			Yes	S3VE
Bis(2-Chloroethyl)ether	190	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	990	ug/kg	1.0			Yes	S3VE
4-Chloro-3-methylphenol	650	ug/kg	1.0			Yes	S3VE
Acenaphthene	870	ug/kg	1.0			Yes	S3VE
2-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	790	ug/kg	1.0			Yes	S3VE
2,2'-Oxybis(1-chloropropane)	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	910	ug/kg	1.0			Yes	S3VE
Acetophenone	190	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	810	ug/kg	1.0			Yes	S3VE
Pyrene	660	ug/kg	1.0			Yes	S3VE
Hexachloroethane	190	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chloroaniline	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	190	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorocyclopentadiene	190	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	190	ug/kg	1.0	U	U	Yes	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	190	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chlorophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	190	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	190	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	190	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	190	ug/kg	1.0	U	U	Yes	S3VE
Carbazole	190	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	21	ug/kg	1.0	J	J	Yes	S3VE
Fluoranthene	190	ug/kg	1.0	U	U	Yes	S3VE
Butylbenzylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	190	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-ethylhexyl)	1600	ug/kg	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1600	ug/kg	1.0			Yes	S3VE
Di-n-octylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluorant hene	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	190	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	190	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	190	ug/kg	1.0	U	U	Yes	S3VE
2,3,4,6-Tetrachlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWRIMS	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214540	pH:		Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	30	ug/kg	1.0		J	Yes	S3VE
Chloromethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Benzene	49	ug/kg	1.0			Yes	S3VE
Trichloroethene	39	ug/kg	1.0			Yes	S3VE
Bromomethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Toluene	43	ug/kg	1.0			Yes	S3VE
Chloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	42	ug/kg	1.0			Yes	S3VE
Trichlorofluorom ethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	95	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom ethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.7	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
4-Methyl-2-pentanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.7	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.7	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.7	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.7	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.7	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MS	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	140	ug/kg	1.0			Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	130	ug/kg	1.0			Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MS	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Acenaphthene	11	ug/kg	1.0			Yes	S3VE
Naphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	4.6	ug/kg	1.0	J	J	Yes	S3VE
Pyrene	19	ug/kg	1.0			Yes	S3VE
Acenaphthylene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	7.9	ug/kg	1.0			Yes	S3VE
Anthracene	3.0	ug/kg	1.0	J	J	Yes	S3VE
Fluoranthene	15	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	15	ug/kg	1.0			Yes	S3VE
Chrysene	7.7	ug/kg	1.0		J	Yes	S3VE
Benzo(b)fluoranthene	12	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	6.7	ug/kg	1.0			Yes	S3VE
Benzo(a)pyrene	9.4	ug/kg	1.0			Yes	S3VE
Indeno(1,2,3-cd)pyrene	11	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	5.0	ug/kg	1.0			Yes	S3VE
Benzo(g,h,i)perylene	14	ug/kg	1.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MSD	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	140	ug/kg	1.0	P		Yes	S3VE
Aroclor-1260	130	ug/kg	1.0			Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MSD	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Acenaphthene	12	ug/kg	1.0			Yes	S3VE
Naphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	5.5	ug/kg	1.0	J	J	Yes	S3VE
Methylnaphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pyrene	19	ug/kg	1.0			Yes	S3VE
Acenaphthylene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	7.7	ug/kg	1.0			Yes	S3VE
Anthracene	2.6	ug/kg	1.0	J	J	Yes	S3VE
Fluoranthene	15	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	15	ug/kg	1.0			Yes	S3VE
Chrysene	7.3	ug/kg	1.0		J	Yes	S3VE
Benzo(b)fluoranthene	15	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	6.4	ug/kg	1.0			Yes	S3VE
Benzo(a)pyrene	9.6	ug/kg	1.0			Yes	S3VE
Indeno(1,2,3-cd)pyrene	11	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	6.0	ug/kg	1.0			Yes	S3VE
Benzo(g,h,i)perylene	13	ug/kg	1.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MSD	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:		pH:	8.6	Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	740	ug/kg	1.0			Yes	S3VE
Benzaldehyde	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	780	ug/kg	1.0			Yes	S3VE
Bis(2-Chloroethyl)ether	180	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	1100	ug/kg	1.0			Yes	S3VE
4-Chloro-3-methylphenol	710	ug/kg	1.0			Yes	S3VE
2-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	1000	ug/kg	1.0			Yes	S3VE
2,2'-Oxybis(1-chloropropane)	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	1100	ug/kg	1.0			Yes	S3VE
Acetophenone	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	1200	ug/kg	1.0			Yes	S3VE
4-Methylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	1100	ug/kg	1.0			Yes	S3VE
Pyrene	900	ug/kg	1.0			Yes	S3VE
Hexachloroethane	180	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	180	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chloroaniline	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	180	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	180	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorocyclopentadiene	180	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	180	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	180	ug/kg	1.0	U	U	Yes	S3VE
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	180	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	180	ug/kg	1.0	U	U	Yes	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	180	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Chlorophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	180	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	180	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	180	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	180	ug/kg	1.0	U	U	Yes	S3VE
Phenanthrene	180	ug/kg	1.0	U	U	Yes	S3VE
Anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Carbazole	180	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	18	ug/kg	1.0	J	J	Yes	S3VE
Fluoranthene	12	ug/kg	1.0	J	J	Yes	S3VE
Butylbenzylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Chrysene	180	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-ethylhexyl)	680	ug/kg	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	680	ug/kg	1.0			Yes	S3VE
Di-n-octylphthalate	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(k)fluorant hene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	180	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	180	ug/kg	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	180	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	180	ug/kg	1.0	U	U	Yes	S3VE
2,3,4,6-Tetrachlorophenol	180	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWR1MSD	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214540	pH:		Sample Date:	05242012	Sample Time:	09:42:00
% Moisture :	8.67	% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	38	ug/kg	1.0		J	Yes	S3VE
Benzene	41	ug/kg	1.0			Yes	S3VE
Chloromethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Trichloroethene	34	ug/kg	1.0			Yes	S3VE
Bromomethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Toluene	43	ug/kg	1.0			Yes	S3VE
Chloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chlorobenzene	42	ug/kg	1.0			Yes	S3VE
Trichlorofluorom ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Acetone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Carbon Disulfide	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl acetate	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methylene chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Butanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Bromochloromet hane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Chloroform	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Cyclohexane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Carbon tetrachloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dioxane	95	ug/kg	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromodichlorom ethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
4-Methyl-2-pentanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Tetrachloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
2-Hexanone	9.5	ug/kg	1.0	U	U	Yes	S3VE
Dibromochloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
Ethylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
o-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
m,p-Xylene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Styrene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Bromoform	4.8	ug/kg	1.0	U	U	Yes	S3VE
Isopropylbenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	4.8	ug/kg	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE
Vinyl chloride	4.8	ug/kg	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	4.8	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS1	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214550	pH:	8.3	Sample Date:	05222012	Sample Time:	11:15:00
% Moisture :	9.76			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	11	ug/kg	1.0			Yes	S3VE
2-Methylnaphthalene	12	ug/kg	1.0			Yes	S3VE
Acenaphthylene	9.6	ug/kg	1.0			Yes	S3VE
Acenaphthene	47	ug/kg	1.0	E	R	No	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	49	ug/kg	1.0	E	R	No	S3VE
Phenanthrene	50	ug/kg	1.0	E	R	No	S3VE
Anthracene	8.5	ug/kg	1.0			Yes	S3VE
Fluoranthene	52	ug/kg	1.0	E	R	No	S3VE
Pyrene	110	ug/kg	1.0	E	R	No	S3VE
Benzo(a)anthracene	45	ug/kg	1.0	E	R	No	S3VE
Chrysene	28	ug/kg	1.0		J	Yes	S3VE
Benzo(b)fluoranthene	96	ug/kg	1.0	E	R	No	S3VE
Benzo(k)fluoranthene	42	ug/kg	1.0	E	R	No	S3VE
Benzo(a)pyrene	81	ug/kg	1.0	E	R	No	S3VE
Indeno(1,2,3-cd)pyrene	66	ug/kg	1.0	E	R	No	S3VE
Dibenzo(a,h)anthracene	17	ug/kg	1.0			Yes	S3VE
Benzo(g,h,i)perylene	66	ug/kg	1.0	E	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS1	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214550	pH:	8.3	Sample Date:	05222012	Sample Time:	11:15:00
% Moisture :	9.76			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	ug/kg	1.0	U	U	Yes	S3VE
Phenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	190	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	190	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	190	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	190	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	190	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	190	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	190	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	52	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	190	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	190	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	190	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	36	ug/kg	1.0	J	R	No	S3VE
Phenanthrene	57	ug/kg	1.0	J	R	No	S3VE
Anthracene	190	ug/kg	1.0	U	U	Yes	S3VE
Carbazole	190	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	51	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE
Fluoranthene	78	ug/kg	1.0	J	R	No	S3VE
Pyrene	150	ug/kg	1.0	J	R	No	S3VE
Butylbenzylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	34	ug/kg	1.0	J	R	No	S3VE
Chrysene	46	ug/kg	1.0	J	R	No	S3VE
Bis(2-ethylhexyl)	50	ug/kg	1.0	J	J <i>Qm</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	50	ug/kg	1.0	J	<i>Qm</i>	Yes	S3VE
Di-n-octylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	43	ug/kg	1.0	J	R	No	S3VE
Benzo(k)fluorant hene	29	ug/kg	1.0	J	R	No	S3VE
Benzo(a)pyrene	48	ug/kg	1.0	J	R	No	S3VE
Indeno(1,2,3-cd)pyrene	39	ug/kg	1.0	J	R	No	S3VE
Dibenzo(a,h)anthracene	190	ug/kg	1.0	U	R	Yes	S3VE
Benzo(g,h,l)perylene	190	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN		Yes	S3VE
Nonanoic acid			1.0	JN		Yes	S3VE
1-(Methylamino)an			1.0	JN		Yes	S3VE
Sulfur			1.0	JN		Yes	S3VE
Cyclic octaatomic sulfur			1.0	JN		Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS1	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214550	pH:	8.3	Sample Date:	05222012	Sample Time:	11:15:00
% Moisture :	9.76			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS1DL	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214550	pH:	8.3	Sample Date:	05222012	Sample Time:	11:15:00
% Moisture :	9.76			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	18	ug/kg	5.0	U	R	No	S3VE
2-Methylnaphthalene	18	ug/kg	5.0	U	R	No	S3VE
Acenaphthylene	11	ug/kg	5.0	JD	R	No	S3VE
Acenaphthene	43	ug/kg	5.0	D	R	No	S3VE
Fluorene	18	ug/kg	5.0	U	R	No	S3VE
Pentachlorophenol	70	ug/kg	5.0	D	J OK	Yes	S3VE
Phenanthrene	70	ug/kg	5.0	D		Yes	S3VE
Anthracene	18	ug/kg	5.0	U	R	No	S3VE
Fluoranthene	74	ug/kg	5.0	D		Yes	S3VE
Pyrene	110	ug/kg	5.0	D		Yes	S3VE
Benzo(a)anthracene	51	ug/kg	5.0	D		Yes	S3VE
Chrysene	33	ug/kg	5.0	D	R	No	S3VE
Benzo(b)fluoranthene	57	ug/kg	5.0	D		Yes	S3VE
Benzo(k)fluoranthene	35	ug/kg	5.0	D		Yes	S3VE
Benzo(a)pyrene	57	ug/kg	5.0	D		Yes	S3VE
Indeno(1,2,3-cd)pyrene	45	ug/kg	5.0	D		Yes	S3VE
Dibenzo(a,h)anthracene	27	ug/kg	5.0	D	R	No	S3VE
Benzo(g,h,i)perylene	42	ug/kg	5.0	D		Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS2	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214551	pH:	8.4	Sample Date:	05222012	Sample Time:	14:45:00
% Moisture :	9.13			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS2	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214551	pH:	8.4	Sample Date:	05222012	Sample Time:	14:45:00
% Moisture :	9.13			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	ug/kg	1.0	U	U	Yes	S3VE
Phenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	190	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	190	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	190	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	190	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	190	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	190	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	190	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	190	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	190	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	190	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	190	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	360	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	190	ug/kg	1.0	U	R	No	S3VE
Anthracene	190	ug/kg	1.0	U	R	No	S3VE
Carbazole	190	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	37	ug/kg	1.0	J	J <i>Qmw</i>	Yes	S3VE
Fluoranthene	190	ug/kg	1.0	U	R	No	S3VE
Pyrene	190	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Chrysene	190	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	45	ug/kg	1.0	J	J <i>Qmw</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	45	ug/kg	1.0	J	JQm	Yes	S3VE
Di-n-octylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	190	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN		Yes	S3VE
Total Alkane TICs			1.0	J		Yes	S3VE
I-(Methylamino)an			1.0	JN		Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWM1	Lab Code: A4
Sample Number: JRWS2	Method: BNA_SIM	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214551	pH: 8.4	Sample Date: 05222012	Sample Time: 14:45:00
% Moisture: 9.13	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	6.8	ug/kg	1.0			Yes	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	9.9	ug/kg	1.0		J <i>Qmv</i>	Yes	S3VE
Phenanthrene	3.6	ug/kg	1.0	J	J <i>Qmv</i>	Yes	S3VE
Anthracene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pyrene	9.8	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	3.6	ug/kg	1.0			Yes	S3VE
Chrysene	3.3	ug/kg	1.0	J	J <i>Qmv</i>	Yes	S3VE
Benzo(b)fluoranthene	4.6	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	2.4	ug/kg	1.0	J	J <i>Qmv</i>	Yes	S3VE
Benzo(a)pyrene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	8.4	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	8.2	ug/kg	1.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS3	Method:	BNA_SIM	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214552	pH:	8.3	Sample Date:	05222012	Sample Time:	15:00:00
% Moisture:	9.79			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	6.3	ug/kg	1.0			Yes	S3VE
2-Methylnaphthalene	9.0	ug/kg	1.0			Yes	S3VE
Acenaphthylene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	4.1	ug/kg	1.0			Yes	S3VE
Fluorene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	8.0	ug/kg	1.0		J QW	Yes	S3VE
Phenanthrene	9.0	ug/kg	1.0			Yes	S3VE
Anthracene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Fluoranthene	8.9	ug/kg	1.0			Yes	S3VE
Pyrene	18	ug/kg	1.0			Yes	S3VE
Benzo(a)anthracene	10	ug/kg	1.0			Yes	S3VE
Chrysene	9.7	ug/kg	1.0		J QW	Yes	S3VE
Benzo(b)fluoranthene	19	ug/kg	1.0			Yes	S3VE
Benzo(k)fluoranthene	11	ug/kg	1.0			Yes	S3VE
Benzo(a)pyrene	3.6	ug/kg	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	20	ug/kg	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	7.0	ug/kg	1.0			Yes	S3VE
Benzo(g,h,i)perylene	25	ug/kg	1.0			Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS3	Method:	BNA	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214552	pH:	8.3	Sample Date:	05222012	Sample Time:	15:00:00
% Moisture :	9.79			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	190	ug/kg	1.0	U	U	Yes	S3VE
Phenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	190	ug/kg	1.0	U	U	Yes	S3VE
Acetophenone	190	ug/kg	1.0	U	U	Yes	S3VE
4-Methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachloroethane	190	ug/kg	1.0	U	U	Yes	S3VE
Nitrobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Isophorone	190	ug/kg	1.0	U	U	Yes	S3VE
2-Nitrophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Naphthalene	190	ug/kg	1.0	U	R	No	S3VE
4-Chloroaniline	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	190	ug/kg	1.0	U	U	Yes	S3VE
Caprolactam	190	ug/kg	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	190	ug/kg	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	190	ug/kg	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	190	ug/kg	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	190	ug/kg	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Dimethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthylene	190	ug/kg	1.0	U	R	No	S3VE
3-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
Acenaphthene	190	ug/kg	1.0	U	R	No	S3VE
2,4-Dinitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
4-Nitrophenol	360	ug/kg	1.0	U	U	Yes	S3VE
Dibenzofuran	190	ug/kg	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	190	ug/kg	1.0	U	U	Yes	S3VE
Diethylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Fluorene	190	ug/kg	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
4-Nitroaniline	360	ug/kg	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	360	ug/kg	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	190	ug/kg	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	190	ug/kg	1.0	U	U	Yes	S3VE
Hexachlorobenzene	190	ug/kg	1.0	U	U	Yes	S3VE
Atrazine	190	ug/kg	1.0	U	U	Yes	S3VE
Pentachlorophenol	360	ug/kg	1.0	U	R	No	S3VE
Phenanthrene	190	ug/kg	1.0	U	R	No	S3VE
Anthracene	190	ug/kg	1.0	U	R	No	S3VE
Carbazole	190	ug/kg	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	57	ug/kg	1.0	J	JRM	Yes	S3VE
Fluoranthene	190	ug/kg	1.0	U	R	No	S3VE
Pyrene	190	ug/kg	1.0	U	R	No	S3VE
Butylbenzylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Chrysene	190	ug/kg	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	67	ug/kg	1.0	J	JRM	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	67	ug/kg	1.0	J	JQW	Yes	S3VE
Di-n-octylphthalate	190	ug/kg	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(a)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	190	ug/kg	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	190	ug/kg	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	190	ug/kg	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	190	ug/kg	1.0	U	U	Yes	S3VE
Cyclic octaatomic sulfur			1.0	JN		Yes	S3VE
Ethane, 1,1,2,2-tetrachloro-			1.0	JN		Yes	S3VE
1,2-Benzenedicarboxylic aci...			1.0	JN		Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWM1	Lab Code:	A4
Sample Number:	JRWS3	Method:	Aroclor	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214552	pH:	8.3	Sample Date:	05222012	Sample Time:	15:00:00
% Moisture:	9.79			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1221	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1232	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1242	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1248	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1254	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1260	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1262	36	ug/kg	1.0	U	U	Yes	S3VE
Aroclor-1268	36	ug/kg	1.0	U	U	Yes	S3VE

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWM1 Case 42569 Contract EPW10018 Region 10 DDTID 153428 SOW SOM01.2

Analytical Sample Listing

VOA_Low_Med

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWM1	Field_Sample	Soil	Low	05212012 08:30:00	05242012 09:51:00			05252012 14:19:00	DB-624	C-5973
JRWM1MS	Matrix_Spike	Soil	Low	05212012 08:30:00	05242012 09:51:00			05252012 17:23:00	DB-624	C-5973
JRWM1MSD	Matrix_Spike_Duplicate	Soil	Low	05212012 08:30:00	05242012 09:51:00			05252012 17:49:00	DB-624	C-5973
JRWM2	Field_Sample	Soil	Low	05212012 09:00:00	05242012 09:51:00			05252012 14:46:00	DB-624	C-5973
JRWM3	Field_Sample	Soil	Low	05212012 09:30:00	05242012 09:51:00			05252012 15:12:00	DB-624	C-5973
JRWM6	Field_Sample	Soil	Low	05212012 11:02:00	05242012 09:51:00			05252012 15:38:00	DB-624	C-5973
JRWM7	Field_Sample	Soil	Low	05212012 11:29:00	05242012 09:51:00			05252012 16:04:00	DB-624	C-5973
JRWM8	Field_Sample	Soil	Low	05212012 11:53:00	05242012 09:51:00			05252012 16:56:00	DB-624	C-5973
JRWR1	Field_Sample	Soil	Low	05242012 09:42:00	05252012 09:25:00			06022012 19:41:00	DB-624	C-5973
JRWR1MS	Matrix_Spike	Soil	Low	05242012 09:42:00	05252012 09:25:00			06022012 20:10:00	DB-624	C-5973
JRWR1MSD	Matrix_Spike_Duplicate	Soil	Low	05242012 09:42:00	05252012 09:25:00			06022012 20:37:00	DB-624	C-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWM1 Case 42569 Contract EPW10018 Region 10 DDTID 153428 SOW SOM01.2

Analytical Sample Listing

BNA

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWR1	Field_Sample	Soil	Low	05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06082012 10:21:00	HP-5MS	E-5973
JRWR1MS	Matrix_Spike	Soil	Low	05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06082012 10:52:00	HP-5MS	E-5973
JRWR1MSD	Matrix_Spike_Duplicate	Soil	Low	05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06082012 11:23:00	HP-5MS	E-5973
JRWS1	Field_Sample	Soil	Low	05222012 11:15:00	05242012 09:51:00	Sonication	06032012 08:30:00	06082012 08:47:00	HP-5MS	E-5973
JRWS2	Field_Sample	Soil	Low	05222012 14:45:00	05242012 09:51:00	Sonication	06032012 08:30:00	06082012 09:18:00	HP-5MS	E-5973
JRWS3	Field_Sample	Soil	Low	05222012 15:00:00	05242012 09:51:00	Sonication	06032012 08:30:00	06082012 09:49:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWM1 Case 42569 Contract EPW10018 Region 10 DDTID 153428 SOW SOM01.2

Analytical Sample Listing

BNA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWR1	Field_Sample	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06102012 16:52:00	HP-5MS	E-5973
JRWR1MS	Matrix_Spike	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06102012 17:24:00	HP-5MS	E-5973
JRWR1MSD	Matrix_Spike_Duplicate	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06102012 17:55:00	HP-5MS	E-5973
JRWS1	Field_Sample	Soil		05222012 11:15:00	05242012 09:51:00	Sonication	06032012 08:30:00	06102012 15:18:00	HP-5MS	E-5973
JRWS1DL	Field_Sample	Soil		05222012 11:15:00	05242012 09:51:00	Sonication	06032012 08:30:00	06102012 22:03:00	HP-5MS	E-5973
JRWS2	Field_Sample	Soil		05222012 14:45:00	05242012 09:51:00	Sonication	06032012 08:30:00	06102012 15:49:00	HP-5MS	E-5973
JRWS3	Field_Sample	Soil		05222012 15:00:00	05242012 09:51:00	Sonication	06032012 08:30:00	06102012 16:21:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWM1 Case 42569 Contract EPW10018 Region 10 DDTID 153428 SOW SOM01.2

Analytical Sample Listing

Pest

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWN1	Field_Sample	Soil		05212012 14:55:00	05242012 09:51:00	Sonication	06032012 08:30:00	06072012 19:54:39	RTX-PEST	C-6890A
JRWN1	Field_Sample	Soil		05212012 14:55:00	05242012 09:51:00	Sonication	06032012 08:30:00	06072012 20:34:09	RTX-PEST2	C-6890B
JRWN1MS	Matrix_Spike	Soil		05212012 14:55:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 08:35:03	RTX-PEST	C-6890A
JRWN1MS	Matrix_Spike	Soil		05212012 14:55:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 09:14:43	RTX-PEST2	C-6890B
JRWN1MSD	Matrix_Spike_Duplicate	Soil		05212012 14:55:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 09:14:43	RTX-PEST	C-6890A
JRWN1MSD	Matrix_Spike_Duplicate	Soil		05212012 14:55:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 09:54:12	RTX-PEST2	C-6890B
JRWN2	Field_Sample	Soil		05212012 15:10:00	05242012 09:51:00	Sonication	06032012 08:30:00	06072012 20:34:09	RTX-PEST	C-6890A
JRWN2	Field_Sample	Soil		05212012 15:10:00	05242012 09:51:00	Sonication	06032012 08:30:00	06072012 21:13:53	RTX-PEST2	C-6890B
JRWN3	Field_Sample	Soil		05212012 15:30:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 11:13:00	RTX-PEST	C-6890A
JRWN3	Field_Sample	Soil		05212012 15:30:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 11:53:00	RTX-PEST2	C-6890B
JRWN6	Field_Sample	Soil		05212012 15:45:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 09:54:12	RTX-PEST	C-6890A
JRWN6	Field_Sample	Soil		05212012 15:45:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 10:33:00	RTX-PEST2	C-6890B
JRWN7	Field_Sample	Soil		05212012 16:05:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 11:53:00	RTX-PEST	C-6890A
JRWN7	Field_Sample	Soil		05212012 16:05:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 12:32:00	RTX-PEST2	C-6890B
JRWN8	Field_Sample	Soil		05212012 16:25:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 12:32:00	RTX-PEST	C-6890A
JRWN8	Field_Sample	Soil		05212012 16:25:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 13:12:25	RTX-PEST2	C-6890B
JRWP1	Field_Sample	Soil		05212012 16:50:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 07:55:36	RTX-PEST	C-6890A
JRWP1	Field_Sample	Soil		05212012 16:50:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 08:35:03	RTX-PEST2	C-6890B
JRWP2	Field_Sample	Soil		05212012 17:10:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 10:33:00	RTX-PEST	C-6890A
JRWP2	Field_Sample	Soil		05212012 17:10:00	05242012 09:51:00	Sonication	06032012 08:30:00	06122012 11:13:00	RTX-PEST2	C-6890B
JRWP3	Field_Sample	Soil		05212012 17:30:00	05242012 09:51:00	Sonication	06032012 08:30:00	06132012 12:03:00	RTX-PEST	C-6890A
JRWP3	Field_Sample	Soil		05212012 17:30:00	05242012 09:51:00	Sonication	06032012 08:30:00	06132012 12:03:00	RTX-PEST2	C-6890B

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWM1 Case 42569 Contract EPW10018 Region 10 DDTID 153428 SOW SOM01.2

Analytical Sample Listing

Aroclor

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWR1	Field_Sample	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 19:17:20	DB-XLB	F-6890A
JRWR1	Field_Sample	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 19:47:10	DB-35MS	F-6890B
JRWR1MS	Matrix_Spike	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 19:47:11	DB-XLB	F-6890A
JRWR1MS	Matrix_Spike	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 20:17:00	DB-35MS	F-6890B
JRWR1MSD	Matrix_Spike_Duplicate	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 20:17:00	DB-XLB	F-6890A
JRWR1MSD	Matrix_Spike_Duplicate	Soil		05242012 09:42:00	05252012 09:25:00	Sonication	06032012 08:30:00	06062012 20:46:58	DB-35MS	F-6890B
JRWS1	Field_Sample	Soil		05222012 11:15:00	05242012 09:51:00	Sonication	06032012 08:30:00	06062012 17:47:35	DB-XLB	F-6890A
JRWS1	Field_Sample	Soil		05222012 11:15:00	05242012 09:51:00	Sonication	06032012 08:30:00	06062012 18:17:32	DB-35MS	F-6890B
JRWS2	Field_Sample	Soil		05222012 14:45:00	05242012 09:51:00	Sonication	06032012 08:30:00	06062012 18:17:32	DB-XLB	F-6890A
JRWS2	Field_Sample	Soil		05222012 14:45:00	05242012 09:51:00	Sonication	06032012 08:30:00	06062012 18:47:21	DB-35MS	F-6890B
JRWS3	Field_Sample	Soil		05222012 15:00:00	05242012 09:51:00	Sonication	06032012 08:30:00	06062012 18:47:21	DB-XLB	F-6890A
JRWS3	Field_Sample	Soil		05222012 15:00:00	05242012 09:51:00	Sonication	06032012 08:30:00	06062012 19:17:20	DB-35MS	F-6890B

Edit History Report

Case No: 42569

Contract: EPW10018

SDG No: JRWM1

Lab Code: A4

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWR1	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Anthracene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Chrysene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Fluorene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWR1	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Pyrene	Reportable	Y	N	Raymond Wu	6/26/12 6:57 PM	
JRWR1	Soil	Pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:12 PM	
JRWS1	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS1	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Benzo(a)anthracene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Benzo(a)pyrene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Benzo(b)fluoranthene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Benzo(g,h,i)perylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Benzo(k)fluoranthene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Chrysene	Reportable	Y	N	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Chrysene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	9/19/12 2:02 PM	
JRWS1	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Fluoranthene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Fluorene	Reportable	Y	N	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Pentachlorophenol	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Phenanthrene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS1	Soil	Pyrene	Reportable	Y	N	Raymond Wu	6/26/12 7:04 PM	
JRWS1	Soil	Pyrene	Validation Flag	J	R	Raymond Wu	6/27/12 6:21 PM	
JRWS2	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Anthracene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(a)anthracene	Validation	U	R	Raymond	6/27/12 6:25 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS2	Soil	Benzo(a)anthracene	Flag	U	R	Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(b)fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(g,h,I)perylene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(g,h,I)perylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Chrysene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Fluorene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Phenanthrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Pyrene	Reportable	Y	N	Raymond Wu	6/27/12 6:25 PM	
JRWS2	Soil	Pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:25 PM	
JRWS3	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Acenaphthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Acenaphthylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Anthracene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(a)anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(a)pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(b)fluoranthene	Validation	U	R	Raymond	6/27/12 6:31 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS3	Soil	Benzo(b)fluoranthene	Flag	U	R	Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(g,h,I)perylene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(g,h,I)perylene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Benzo(k)fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Chrysene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Chrysene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Dibenzo(a,h)anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Fluoranthene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Fluorene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Pentachlorophenol	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Phenanthrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Pyrene	Reportable	Y	N	Raymond Wu	6/27/12 6:31 PM	
JRWS3	Soil	Pyrene	Validation Flag	U	R	Raymond Wu	6/27/12 6:31 PM	

Method: Pest

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWN1	Soil	Methoxychlor	Validated Result	13	20	Raymond Wu	6/26/12 7:19 PM	
JRWN1	Soil	Methoxychlor	Validation Flag	J	U	Raymond Wu	6/26/12 7:19 PM	
JRWN6	Soil	4,4'-DDE	Validated Result	2.2	3.7	Raymond Wu	6/26/12 7:21 PM	
JRWN6	Soil	4,4'-DDE	Validation Flag	J	U	Raymond Wu	6/26/12 7:21 PM	
JRWN6	Soil	alpha-Chlordane	Validation Flag	J	U	Raymond Wu	6/26/12 7:21 PM	

Method: BNA_SIM

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS1	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Acenaphthene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Benzo(a)anthracene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Benzo(a)pyrene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Benzo(b)fluoranthene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Benzo(g,h,i)perylene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Benzo(k)fluoranthene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Fluoranthene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Fluoranthene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Indeno(1,2,3-cd)pyrene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Pentachlorophenol	Validation Flag	J	R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Phenanthrene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Phenanthrene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1	Soil	Pyrene	Reportable	Y	N	Raymond Wu	6/26/12 7:05 PM	
JRWS1	Soil	Pyrene	Validation Flag		R	Raymond Wu	6/27/12 6:15 PM	
JRWS1DL	Soil	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	2-Methylnaphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Acenaphthene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Acenaphthene	Validation Flag		R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Acenaphthylene	Validation Flag	J	R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Anthracene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Anthracene	Validation Flag	U	R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Chrysene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Chrysene	Validation Flag	J	R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Dibenzo(a,h)anthracene	Validation Flag		R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Fluorene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Fluorene	Validation Flag	U	R	Raymond Wu	6/27/12 6:18 PM	
JRWS1DL	Soil	Naphthalene	Reportable	Y	N	Raymond Wu	6/26/12 7:11 PM	
JRWS1DL	Soil	Naphthalene	Validation Flag	U	R	Raymond Wu	6/27/12 6:18 PM	



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Global Environmental Specialists

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MEMORANDUM

DATE: July 10, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 11 water samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Trace Volatile Organic Compounds (TVOCs), TVOC-Selective Ion Monitoring (SIM), Semivolatile Organic Compounds (SVOCs), SVOCs-SIM, and polychlorinated biphenyls (CLP SOW SOM01.2) were performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

JRWQ5	JRWQ9	JRWR3	JRWS6	JRWS7
JRWS9	JRWT2	JRWT3	JRWT4	JRWT5
JRWT6				

No discrepancies were noted. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.

The 2-hexanone results in samples JRWS7 and JRWT3 were qualified as not detected (U) based on associated trip blank contamination.



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

July 3, 2012

Reply to: Donald M. Brown
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Organic Analyses of the Water Samples Collected from the Jefferson Avenue Site - Case Number 42569, SDG JRWQ5

From: Donald M. Brown, QA Chemist^{Dmb}
USEPA Region 10, Office of Environmental Assessment, Environmental Services Unit

To: Joanne LaBaw, Site Assessment Manager
USEPA Region 10, Office of Environmental Cleanup

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of eleven (11) water samples collected from the above referenced site has been completed. These samples were analyzed for Trace Volatile Organic Compounds (TVOCs), TVOCs using Selective Ion Monitoring (SIM), Semivolatile Organic Compounds (SVOCs), SVOCs by SIM, and/or Aroclors. All samples were analyzed by A4 Scientific, Inc. located in The Woodlands, TX. The laboratory reported additional analyses (TVOC, TVOC by SIM, Pesticides and/or Aroclors) for samples JRWS6 and JRWS9 in SDG JRWP6. As requested by the project, there were two modifications to the analyses. One modification (under Modification Reference Number 1978.2) required the laboratory to analyze thirteen TVOCs using SIM analysis at a Contract Required Quantitation Limit (CRQL) of 0.20 µg/L if the result was undetected or detected below the CRQL in the full scan analysis. The second modification (under Modification Reference Number 1930.2) required the laboratory to analyze all Aroclors at a CRQL of 0.10 µg/L.

All sample analyses were evaluated following EPA's Stage 3 Data Validation Electronic Process (S3VE). The validation was conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the Jefferson Avenue Site, Targeted Brownfields Assessment (May 2012); the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2); the Contract Laboratory Program's National Functional Guidelines for Organic Data Review; and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer. The conclusions presented herein are based on the information provided for the review.

Sample JRWT6 was reanalyzed at a five-fold (5X) dilution to bring the concentration of trace volatile compound toluene within the linear range of the instrument. The result for this compound in this sample was reported from the diluted analysis and the reporting limit is elevated.

Sample JRWS6 did not meet the holding time requirement (i.e., greater than seven days from sample collection to sample extraction) for the SVOC and SVOC SIM analyses, thus the results were considered estimates for this sample and were qualified "J" or "UJ".

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction, and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Trace Volatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	Y*	Non-detect or < 5X Blank [†]
Trace Volatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Aroclor Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank

*See the Summary of Validation Qualifiers Applied section below for an explanation of qualifications affecting the data.

†10X Blank for ketones or solvents.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified "U" and were reported at the CRQL or at the level of detection due to method and/or storage blank contamination.

All sample data with values reported below the CRQL were qualified "J".

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 that the analyte is present. The associated numerical result is an estimate.

Attachments:

Sample Summary Report
Analytical Sample Listing (Report #6)

Sample Summary Report

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ5	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214534	pH: 2.0	Sample Date: 05242012	Sample Time: 18:14:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214534	pH:	8.2	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214534	pH:	8.2	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	0.49	ug/L	1.0	J	J <i>Qmv</i>	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.90	ug/L	1.0	J	J <i>Qmv</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	15	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	15	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Cyclic octaatomic sulfur			1.0	JN	JN	Yes	S3VE
o-Xylene			1.0	JN	R	No	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214534	pH:	2.0	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214534	pH:	8.2	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5MS	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:		pH:	8.2	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture:	0			% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.29	ug/L	1.0	P		Yes	S3VE
Aroclor-1260	0.36	ug/L	1.0			Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5MS	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214534	pH:	2.0	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :	0			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	6.5	ug/L	1.0		J	Yes	S3VE
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Benzene	6.2	ug/L	1.0			Yes	S3VE
Trichloroethene	6.1	ug/L	1.0		J	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
Toluene	6.0	ug/L	1.0			Yes	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chlorobenzene	5.6	ug/L	1.0			Yes	S3VE
Trichlorofluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0		U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5MS	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	8.2	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :	0			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	26	ug/L	1.0			Yes	S3VE
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	26	ug/L	1.0			Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	38	ug/L	1.0			Yes	S3VE
4-Chloro-3-methylphenol	29	ug/L	1.0			Yes	S3VE
Acenaphthene	36	ug/L	1.0			Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	31	ug/L	1.0			Yes	S3VE
2,4-Dinitrotoluene	39	ug/L	1.0		J	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	27	ug/L	1.0			Yes	S3VE
Pyrene	26	ug/L	1.0			Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	U	Yes	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenanthrene	5.0	ug/L	1.0	U	U	Yes	S3VE
Anthracene	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.85	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	U	Yes	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	U	Yes	S3VE
Chrysene	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-ethylhexyl)	10	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	10	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ5MS	Method: BNA_SIM	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 8.2	Sample Date: 05242012	Sample Time: 18:14:00
% Moisture: 0	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Acenaphthene	0.36	ug/L	1.0			Yes	S3VE
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.038	ug/L	1.0	J	J QM	Yes	S3VE
Pyrene	0.24	ug/L	1.0			Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ5MSD	Method: Aroclor	Matrix: Water	MA Number: 1930.2
Sample Location:	pH: 8.2	Sample Date: 05242012	Sample Time: 18:14:00
% Moisture: 0	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.31	ug/L	1.0	P		Yes	S3VE
Aroclor-1260	0.36	ug/L	1.0			Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ5MSD	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 8.2	Sample Date: 05242012	Sample Time: 18:14:00
% Moisture : 0		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	26	ug/L	1.0			Yes	S3VE
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	27	ug/L	1.0			Yes	S3VE
N-Nitroso-di-n-propylamine	36	ug/L	1.0			Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	27	ug/L	1.0			Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	33	ug/L	1.0			Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	32	ug/L	1.0			Yes	S3VE
2,4-Dinitrotoluene	38	ug/L	1.0			Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	29	ug/L	1.0			Yes	S3VE
Pyrene	27	ug/L	1.0			Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	U	Yes	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenanthrene	5.0	ug/L	1.0	U	U	Yes	S3VE
Anthracene	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.81	ug/L	1.0	J	J 	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	U	Yes	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	U	Yes	S3VE
Chrysene	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-ethylhexyl)	8.1	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	8.1	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluorant hene	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5MSD	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214534	pH:	2.0	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :	0			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.0	ug/L	1.0		J	Yes	S3VE
Benzene	5.7	ug/L	1.0			Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichloroethene	5.4	ug/L	1.0			Yes	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Toluene	5.4	ug/L	1.0			Yes	S3VE
Chlorobenzene	5.3	ug/L	1.0			Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,1,2-Tetrachloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ5MSD	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:	8.2	Sample Date:	05242012	Sample Time:	18:14:00
% Moisture :	0			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Acenaphthene	0.30	ug/L	1.0			Yes	S3VE
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.030	ug/L	1.0	J	J <i>Q₁₁</i>	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.20	ug/L	1.0			Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214538	pH:	2.0	Sample Date:	05242012	Sample Time:	18:58:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.93	ug/L	1.0		U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,1,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ9	Method: Aroclor	Matrix: Water	MA Number: 1930.2
Sample Location: 12214538	pH: 8.4	Sample Date: 05242012	Sample Time: 18:58:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ9	Method: BNA_SIM	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214538	pH: 8.4	Sample Date: 05242012	Sample Time: 18:58:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWQ9	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214538	pH: 2.0	Sample Date: 05242012	Sample Time: 18:58:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWQ9	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214538	pH:	8.4	Sample Date:	05242012	Sample Time:	18:58:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	1.1	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	9.4	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	9.4	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Octadecanoic acid			1.0	JN	JN	Yes	S3VE
Cyclic octaatomic sulfur			1.0	JN	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWR3	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214542	pH:	8.4	Sample Date:	05252012	Sample Time:	13:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWR3	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214542	pH:	8.6	Sample Date:	05252012	Sample Time:	13:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWR3	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214542	pH:	2.0	Sample Date:	05252012	Sample Time:	13:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWR3	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214542	pH: 2.0	Sample Date: 05252012	Sample Time: 13:50:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWR3	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214542	pH:	8.6	Sample Date:	05252012	Sample Time:	13:50:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.73	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	13	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	13	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWS6	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214555	pH:	8.9	Sample Date:	05222012	Sample Time:	14:10:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	UJ	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	UJ	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	UJ	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	UJ	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	UJ	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	UJ	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	UJ	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	UJ	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	UJ	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	UJ	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Di-n-butylphthalate	0.96	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	UJ	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	1.3	ug/L	1.0	J	J <i>Qm</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1.3	ug/L	1.0	J	J <i>Qmu</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Benzoic acid, p-tert-butyl-			1.0	JN	JN	Yes	S3VE
Heptanal			1.0	JN	JN	Yes	S3VE
Total Alkane TICs			1.0	J	JN	Yes	S3VE
Tri(2-chloroethyl) phosphate			1.0	JN	JN	Yes	S3VE
1-Pentene, 2-methyl-			1.0	JN	JN	Yes	S3VE
Cyclohexene, 3-methyl-			1.0	JN	JN	Yes	S3VE
Octanal			1.0	JN	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWS6	Method: BNA_SIM	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214555	pH: 8.9	Sample Date: 05222012	Sample Time: 14:10:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	UJ	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWS7	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214556	pH:	2.0	Sample Date:	05242012	Sample Time:	16:40:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.45	ug/L	1.0	J	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	11	ug/L	1.0			Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0 3.8 <i>mw</i>	ug/L	1.0	J	<i>U-J mw</i>	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Benzene, 1,2,3-trimethyl- (01)			1.0	JN	JN	Yes	S3VE
Benzene, 1,2,3-trimethyl- (02)			1.0	JN	R	No	S3VE
Benzene, 1,2,3-trimethyl- (01)			1.0	JN	R	No	S3VE
Benzene, 1,2,3-trimethyl- (03)			1.0	JN	JN	Yes	S3VE
Benzene, 1-ethyl-4-methyl-			1.0	JN	JN	Yes	S3VE
Benzene, 1,2,3-trimethyl- (01)			1.0	JN	R	No	S3VE
Benzene, 1,2,3-trimethyl- (02)			1.0	JN	R	No	S3VE
Benzene, 1-ethyl-2-methyl-			1.0	JN	JN	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzene, 1,2,3-trimethyl- (03)			1.0	JN	R	No	S3VE
Benzene, 1,2,3-trimethyl- (03)			1.0	JN	R	No	S3VE
Benzene, 1,2,3-trimethyl- (02)			1.0	JN	JN	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWS7	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214556	pH:	2.0	Sample Date:	05242012	Sample Time:	16:40:00
% Moisture:		% Solids:					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.30	ug/L	1.0			Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWS9	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214558	pH:	8.3	Sample Date:	05242012	Sample Time:	10:35:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.83	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	2.3	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.3	ug/L	1.0	J	J <i>QW</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWS9	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214558	pH:	8.9	Sample Date:	05242012	Sample Time:	10:35:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWS9	Method: BNA_SIM	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214558	pH: 8.3	Sample Date: 05242012	Sample Time: 10:35:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	R	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	UJ	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(k)fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Dibenzo(a,h)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWT2	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214561	pH: 2.0	Sample Date: 05242012	Sample Time: 17:25:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT2	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214561	pH:	2.0	Sample Date:	05242012	Sample Time:	17:25:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	4.5	ug/L	1.0	J	J <i>Qmu</i>	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT3	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214562	pH:	8.1	Sample Date:	05242012	Sample Time:	16:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT3	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214562	pH:	2.0	Sample Date:	05242012	Sample Time:	16:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.51	ug/L	1.0			Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT3	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214562	pH:	2.0	Sample Date:	05242012	Sample Time:	16:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.35	ug/L	1.0	J	J <i>QML</i>	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	<i>510.46 MB</i>	ug/L	1.0	J	<i>U - J QML</i>	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT4	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214563	pH:	2.0	Sample Date:	05242012	Sample Time:	17:00:00
% Moisture:				% Solids:			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.15	ug/L	1.0	J	J <i>QMS</i>	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,1,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT4	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214563	pH:	8.3	Sample Date:	05242012	Sample Time:	17:00:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWT4	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214563	pH: 2.0	Sample Date: 05242012	Sample Time: 17:00:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.48	ug/L	1.0			Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT5	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	12214564	pH:	2.0	Sample Date:	05252012	Sample Time:	12:18:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.94	ug/L	1.0			Yes	S3VE
Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT5	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214564	pH:	2.0	Sample Date:	05252012	Sample Time:	12:18:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	1.4	ug/L	1.0		R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyleyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT5	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214564	pH:	8.5	Sample Date:	05252012	Sample Time:	12:18:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWT6	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214565	pH: 2.0	Sample Date: 05252012	Sample Time: 10:15:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluoromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	U	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	U	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	45	ug/L	1.0	E	R	No	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Butanal			1.0	JN	JN	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWT6	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: 12214565	pH: 2.0	Sample Date: 05252012	Sample Time: 10:15:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	1.9	ug/L	1.0			Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	UJ	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42569	Contract:	EPW10018	SDG No:	JRWQ5	Lab Code:	A4
Sample Number:	JRWT6	Method:	Aroclor	Matrix:	Water	MA Number:	1930.2
Sample Location:	12214565	pH:	8.7	Sample Date:	05252012	Sample Time:	10:15:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42569	Contract: EPW10018	SDG No: JRWQ5	Lab Code: A4
Sample Number: JRWT6DL	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214565	pH: 2.0	Sample Date: 05252012	Sample Time: 10:15:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoromethane	2.5	ug/L	5.0	U	R	No	S3VE
Chloromethane	2.5	ug/L	5.0	U	R	No	S3VE
Vinyl chloride	2.5	ug/L	5.0	U	R	No	S3VE
Bromomethane	2.5	ug/L	5.0	U	R	No	S3VE
Chloroethane	2.5	ug/L	5.0	U	R	No	S3VE
Trichlorofluoromethane	2.5	ug/L	5.0	U	R	No	S3VE
1,1-Dichloroethene	2.5	ug/L	5.0	U	R	No	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	ug/L	5.0	U	R	No	S3VE
Acetone	25	ug/L	5.0	U	R	No	S3VE
Carbon Disulfide	2.5	ug/L	5.0	U	R	No	S3VE
Methyl acetate	2.5	ug/L	5.0	U	R	No	S3VE
Methylene chloride	7.4	ug/L	5.0	D	R	No	S3VE
trans-1,2-Dichloroethene	2.5	ug/L	5.0	U	R	No	S3VE
Methyl tert-butyl ether	2.5	ug/L	5.0	U	R	No	S3VE
1,1-Dichloroethane	2.5	ug/L	5.0	U	R	No	S3VE
cis-1,2-Dichloroethene	2.5	ug/L	5.0	U	R	No	S3VE
2-Butanone	25	ug/L	5.0	U	R	No	S3VE
Bromochloromethane	2.5	ug/L	5.0	U	R	No	S3VE
Chloroform	2.5	ug/L	5.0	U	R	No	S3VE
1,1,1-Trichloroethane	2.5	ug/L	5.0	U	R	No	S3VE
Cyclohexane	2.5	ug/L	5.0	U	R	No	S3VE
Carbon tetrachloride	2.5	ug/L	5.0	U	R	No	S3VE
Benzene	2.5	ug/L	5.0	U	R	No	S3VE
1,2-Dichloroethane	2.5	ug/L	5.0	U	R	No	S3VE
Trichloroethene	2.5	ug/L	5.0	U	R	No	S3VE
Methylcyclohexane	2.5	ug/L	5.0	U	R	No	S3VE
1,2-Dichloropropane	2.5	ug/L	5.0	U	R	No	S3VE
Bromodichloromethane	2.5	ug/L	5.0	U	R	No	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	2.5	ug/L	5.0	U	R	No	S3VE
4-Methyl-2-pentanone	25	ug/L	5.0	U	R	No	S3VE
Toluene	44	ug/L	5.0	D		Yes	S3VE
trans-1,3-Dichloropropene	2.5	ug/L	5.0	U	R	No	S3VE
1,1,2-Trichloroethane	2.5	ug/L	5.0	U	R	No	S3VE
Tetrachloroethene	2.5	ug/L	5.0	U	R	No	S3VE
2-Hexanone	25	ug/L	5.0	U	R	No	S3VE
Dibromochloromethane	2.5	ug/L	5.0	U	R	No	S3VE
1,2-Dibromoethane	2.5	ug/L	5.0	U	R	No	S3VE
Chlorobenzene	2.5	ug/L	5.0	U	R	No	S3VE
Ethylbenzene	2.5	ug/L	5.0	U	R	No	S3VE
o-Xylene	2.5	ug/L	5.0	U	R	No	S3VE
m,p-Xylene	2.5	ug/L	5.0	U	R	No	S3VE
Styrene	2.5	ug/L	5.0	U	R	No	S3VE
Bromoform	2.5	ug/L	5.0	U	R	No	S3VE
Isopropylbenzene	2.5	ug/L	5.0	U	R	No	S3VE
1,1,2,2-Tetrachloroethane	2.5	ug/L	5.0	U	R	No	S3VE
1,3-Dichlorobenzene	2.5	ug/L	5.0	U	R	No	S3VE
1,4-Dichlorobenzene	2.5	ug/L	5.0	U	R	No	S3VE
1,2-Dichlorobenzene	2.5	ug/L	5.0	U	R	No	S3VE
1,2-Dibromo-3-chloropropane	2.5	ug/L	5.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	2.5	ug/L	5.0	U	R	No	S3VE
1,2,3-Trichlorobenzene	2.5	ug/L	5.0	U	R	No	S3VE

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ5 Case 42569 Contract EPW10018 Region 10 DDTID 153655 SOW SOM01.2

Analytical Sample Listing

VOA_Trace

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ5	Field_Sample	Water	Trace	05242012 18:14:00	05302012 10:17:00			06052012 19:18:00	DB-624	H-5975
JRWQ5MS	Matrix_Spike	Water	Trace	05242012 18:14:00	05302012 10:17:00			06062012 15:32:00	DB-624	H-5975
JRWQ5MSD	Matrix_Spike_Duplicate	Water	Trace	05242012 18:14:00	05302012 10:17:00			06062012 15:58:00	DB-624	H-5975
JRWQ9	Field_Sample	Water	Trace	05242012 18:58:00	05302012 10:17:00			06052012 15:50:00	DB-624	H-5975
JRWR3	Field_Sample	Water	Trace	05252012 13:50:00	05302012 10:17:00			06052012 16:17:00	DB-624	H-5975
JRWS7	Field_Sample	Water	Trace	05242012 16:40:00	05302012 10:17:00			06052012 16:43:00	DB-624	H-5975
JRWT2	Field_Sample	Water	Trace	05242012 17:25:00	05302012 10:17:00			06052012 17:09:00	DB-624	H-5975
JRWT3	Field_Sample	Water	Trace	05242012 16:50:00	05302012 10:17:00			06052012 17:35:00	DB-624	H-5975
JRWT4	Field_Sample	Water	Trace	05242012 17:00:00	05302012 10:17:00			06052012 18:01:00	DB-624	H-5975
JRWT5	Field_Sample	Water	Trace	05252012 12:18:00	05302012 10:17:00			06052012 18:26:00	DB-624	H-5975
JRWT6	Field_Sample	Water	Trace	05252012 10:15:00	05302012 10:17:00			06052012 18:52:00	DB-624	H-5975
JRWT6DL	Field_Sample	Water	Trace	05252012 10:15:00	05302012 10:17:00			06062012 16:24:00	DB-624	H-5975

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ5 Case 42569 Contract EPW10018 Region 10 DDTID 153655 SOW SOM01.2

Analytical Sample Listing

VOA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ5	Field_Sample	Water		05242012 18:14:00	05302012 10:17:00			06072012 17:03:00	DB-624	H-5975
JRWQ9	Field_Sample	Water		05242012 18:58:00	05302012 10:17:00			06072012 17:31:00	DB-624	H-5975
JRWR3	Field_Sample	Water		05252012 13:50:00	05302012 10:17:00			06072012 17:57:00	DB-624	H-5975
JRWS7	Field_Sample	Water		05242012 16:40:00	05302012 10:17:00			06072012 18:23:00	DB-624	H-5975
JRWT2	Field_Sample	Water		05242012 17:25:00	05302012 10:17:00			06072012 18:49:00	DB-624	H-5975
JRWT3	Field_Sample	Water		05242012 16:50:00	05302012 10:17:00			06072012 19:14:00	DB-624	H-5975
JRWT4	Field_Sample	Water		05242012 17:00:00	05302012 10:17:00			06072012 19:40:00	DB-624	H-5975
JRWT5	Field_Sample	Water		05252012 12:18:00	05302012 10:17:00			06072012 20:06:00	DB-624	H-5975
JRWT6	Field_Sample	Water		05252012 10:15:00	05302012 10:17:00			06072012 20:32:00	DB-624	H-5975

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ5 Case 42569 Contract EPW10018 Region 10 DDTID 153655 SOW SOM01.2

Analytical Sample Listing

BNA

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ5	Field_Sample	Water	Low	05242012 18:14:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06082012 01:32:00	HP-5MS	E-5973
JRWQ5MS	Matrix_Spike	Water	Low	05242012 18:14:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06082012 03:06:00	HP-5MS	E-5973
JRWQ5MSD	Matrix_Spike_Duplicate	Water	Low	05242012 18:14:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06082012 03:37:00	HP-5MS	E-5973
JRWQ9	Field_Sample	Water	Low	05242012 18:58:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06082012 02:03:00	HP-5MS	E-5973
JRWR3	Field_Sample	Water	Low	05252012 13:50:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06132012 14:01:00	HP-5MS	G-5973
JRWS6	Field_Sample	Water	Low	05222012 14:10:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06082012 06:10:00	HP-5MS	E-5973
JRWS9	Field_Sample	Water	Low	05242012 10:35:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06082012 02:34:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ5 Case 42569 Contract EPW10018 Region 10 DDTID 153655 SOW SOM01.2

Analytical Sample Listing

BNA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ5	Field_Sample	Water		05242012 18:14:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06012012 23:02:00	HP-5MS	E-5973
JRWQ5MS	Matrix_Spike	Water		05242012 18:14:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06132012 20:24:00	HP-5MS	E-5973
JRWQ5MSD	Matrix_Spike_Duplicate	Water		05242012 18:14:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06132012 20:56:00	HP-5MS	E-5973
JRWQ9	Field_Sample	Water		05242012 18:58:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06022012 00:35:00	HP-5MS	E-5973
JRWR3	Field_Sample	Water		05252012 13:50:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06022012 01:07:00	HP-5MS	E-5973
JRWS6	Field_Sample	Water		05222012 14:10:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06022012 01:38:00	HP-5MS	E-5973
JRWS9	Field_Sample	Water		05242012 10:35:00	05302012 10:17:00	Liq_Liq	05302012 15:00:00	06022012 02:09:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWQ5 Case 42569 Contract EPW10018 Region 10 DDTID 153655 SOW SOM01.2

Analytical Sample Listing

Aroclor

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWQ5	Field_Sample	Water		05242012 18:14:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 19:44:59	DB-XLB	F-6890A
JRWQ5	Field_Sample	Water		05242012 18:14:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 20:14:49	DB-35MS	F-6890B
JRWQ5MS	Matrix_Spike	Water		05242012 18:14:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06112012 09:53:29	DB-XLB	F-6890A
JRWQ5MS	Matrix_Spike	Water		05242012 18:14:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06112012 10:23:00	DB-35MS	F-6890B
JRWQ5MSD	Matrix_Spike_Duplicate	Water		05242012 18:14:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06112012 10:23:00	DB-XLB	F-6890A
JRWQ5MSD	Matrix_Spike_Duplicate	Water		05242012 18:14:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06112012 10:53:00	DB-35MS	F-6890B
JRWQ9	Field_Sample	Water		05242012 18:58:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 20:14:49	DB-XLB	F-6890A
JRWQ9	Field_Sample	Water		05242012 18:58:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 20:44:38	DB-35MS	F-6890B
JRWR3	Field_Sample	Water		05252012 13:50:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 20:44:38	DB-XLB	F-6890A
JRWR3	Field_Sample	Water		05252012 13:50:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 21:14:28	DB-35MS	F-6890B
JRWS9	Field_Sample	Water		05242012 10:35:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 21:14:28	DB-XLB	F-6890A
JRWS9	Field_Sample	Water		05242012 10:35:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 21:44:53	DB-35MS	F-6890B
JRWT3	Field_Sample	Water		05242012 16:50:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 21:44:53	DB-XLB	F-6890A
JRWT3	Field_Sample	Water		05242012 16:50:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 22:14:00	DB-35MS	F-6890B
JRWT4	Field_Sample	Water		05242012 17:00:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 22:14:00	DB-XLB	F-6890A
JRWT4	Field_Sample	Water		05242012 17:00:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 22:44:00	DB-35MS	F-6890B
JRWT5	Field_Sample	Water		05252012 12:18:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 22:44:00	DB-XLB	F-6890A
JRWT5	Field_Sample	Water		05252012 12:18:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 23:14:00	DB-35MS	F-6890B
JRWT6	Field_Sample	Water		05252012 10:15:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 23:14:00	DB-XLB	F-6890A
JRWT6	Field_Sample	Water		05252012 10:15:00	05302012 10:17:00	Sep_Funnel	05302012 15:00:00	06072012 23:44:00	DB-35MS	F-6890B

Edit History Report

Case No: 42569

Contract: EPW10018

SDG No: JRWQ5

Lab Code: A4

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ5	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Acenaphthene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Chrysene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Chrysene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Cyclic octaatomic sulfur	Validation Flag		JN	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Fluorene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Fluorene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Naphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Naphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Phenanthrene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ5	Water	Pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	Pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	o-Xylene	Reportable	Y	N	Donald Brown	7/2/12 5:30 PM	
JRWQ5	Water	o-Xylene	Validation Flag		R	Donald Brown	7/2/12 5:30 PM	
JRWQ9	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Acenaphthene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Chrysene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Chrysene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Cyclic octaatomic sulfur	Validation Flag		JN	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Fluorene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Fluorene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Naphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Naphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Octadecanoic acid	Validation Flag		JN	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Phenanthrene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ9	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:35 PM	
JRWQ9	Water	Pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:35 PM	
JRWR3	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Acenaphthene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Chrysene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Chrysene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Fluorene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Fluorene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Naphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Naphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Phenanthrene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:38 PM	
JRWR3	Water	Pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWR3	Water	Total Alkane TICs	Validation Flag		JN	Donald Brown	7/2/12 5:38 PM	
JRWS6	Water	1,1'-Biphenyl	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	1,2,4,5-Tetrachlorobenzene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	1-Pentene, 2-methyl-	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,2'-Oxybis(1-chloropropane)	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,3,4,6-Tetrachlorophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,4,5-Trichlorophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,4,6-Trichlorophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,4-Dichlorophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,4-Dimethylphenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,4-Dinitrophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,4-Dinitrotoluene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2,6-Dinitrotoluene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Chloronaphthalene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Chlorophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Methylphenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Nitroaniline	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	2-Nitrophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	3,3'-Dichlorobenzidine	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	3-Nitroaniline	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4,6-Dinitro-2-methylphenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Bromophenylphenylether	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Chloro-3-methylphenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Chloroaniline	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Chlorophenylphenylether	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Methylphenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Nitroaniline	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	4-Nitrophenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Acenaphthene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Acetophenone	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS6	Water	Atrazine	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzaldehyde	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(g,h,I)perylene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(g,h,I)perylene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Benzoic acid, p-tert-butyl-	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Bis(2-Chloroethyl)ether	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Bis(2-chloroethoxy)methane	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Butylbenzylphthalate	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Caprolactam	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Carbazole	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Chrysene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Chrysene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Cyclohexene, 3-methyl-	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Di-n-octylphthalate	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Dibenzofuran	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Diethylphthalate	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Dimethylphthalate	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Fluorene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Fluorene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Heptanal	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Hexachlorobenzene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Hexachlorobutadiene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Hexachlorocyclopentadiene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Hexachloroethane	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Isophorone	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	N-Nitroso-di-n-propylamine	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS6	Water	N-Nitrosodiphenylamine	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Naphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Naphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Nitrobenzene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Octanal	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Phenanthrene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Phenol	Validation Flag	U	UJ	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Total Alkane TICs	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS6	Water	Tri(2-chloroethyl) phosphate	Validation Flag		JN	Donald Brown	7/2/12 5:43 PM	
JRWS9	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Acenaphthene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Chrysene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Chrysene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Fluoranthene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS9	Water	Fluorene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Fluorene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Naphthalene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Naphthalene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Phenanthrene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Pyrene	Reportable	Y	N	Donald Brown	7/2/12 5:48 PM	
JRWS9	Water	Pyrene	Validation Flag	U	R	Donald Brown	7/2/12 5:48 PM	

Method: VOA_Trace

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ5	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWQ5	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:20 PM	
JRWQ5	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:20 PM	
JRWQ9	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Methylene chloride	Validated Result	0.50	0.93	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:23 PM	
JRWQ9	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:23 PM	
JRWR3	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWR3	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:26 PM	
JRWR3	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:26 PM	
JRWS7	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (01)	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (01)	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (01)	Validation Flag		JN	Donald Brown	7/2/12 3:30 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS7	Water	Benzene, 1,2,3-trimethyl- (01)	Validation Flag		R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (01)	Validation Flag		R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (02)	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (02)	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (02)	Validation Flag		JN	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (02)	Validation Flag		R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (02)	Validation Flag		R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (03)	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (03)	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (03)	Validation Flag		JN	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (03)	Validation Flag		R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1,2,3-trimethyl- (03)	Validation Flag		R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1-ethyl-2-methyl-	Validation Flag		JN	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Benzene, 1-ethyl-4-methyl-	Validation Flag		JN	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Chloroform	Validation Flag	J	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:30 PM	
JRWS7	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:30 PM	
JRWT2	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT2	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:39 PM	
JRWT2	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:39 PM	
JRWT3	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:42 PM	
JRWT3	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:42 PM	
JRWT4	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT4	Water	e	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:51 PM	
JRWT4	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:51 PM	
JRWT5	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT5	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Chloroform	Validation Flag		R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 3:54 PM	
JRWT5	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 3:54 PM	
JRWT6	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,1,2,2-Tetrachloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 4:02 PM	
JRWT6	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 4:02 PM	
JRWT6	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Butanal	Validation Flag		JN	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Dibromochloroethane	Reportable	N	Y	Donald Brown	7/2/12 4:02 PM	
JRWT6	Water	Dibromochloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Dibromochloroethane	Validation Flag	R	U	Donald Brown	7/2/12 4:02 PM	
JRWT6	Water	Dibromochloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT6	Water	Toluene	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Toluene	Validation Flag		R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 4:00 PM	
JRWT6	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 4:00 PM	
JRWT6DL	Water	1,1,1-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,1-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1-Dichloroethene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,1-Dichloroethene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2,3-Trichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2,3-Trichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2,4-Trichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2,4-Trichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,3-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,3-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	2-Butanone	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	2-Butanone	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT6DL	Water	2-Hexanone	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	2-Hexanone	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	4-Methyl-2-pentanone	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	4-Methyl-2-pentanone	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Acetone	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Acetone	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Benzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Benzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromochloromethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromochloromethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromodichloromethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromodichloromethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromoform	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromoform	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromomethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Bromomethane	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Carbon Disulfide	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Carbon Disulfide	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chlorobenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chlorobenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chloroethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chloroethane	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chloroform	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chloroform	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chloromethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Chloromethane	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Cyclohexane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Cyclohexane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Dibromochloromethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Dibromochloromethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Dichlorodifluoromethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Dichlorodifluoromethane	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Ethylbenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Ethylbenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Isopropylbenzene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Isopropylbenzene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methyl acetate	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methyl acetate	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methyl tert-butyl	Reportable	Y	N	Donald	7/2/12 4:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT6DL	Water	ether	Reportable	Y	N	Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methyl tert-butyl ether	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methylcyclohexane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methylcyclohexane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methylene chloride	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Methylene chloride	Validation Flag		R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Styrene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Styrene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Trichloroethene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Trichloroethene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Trichlorofluoromethane	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Trichlorofluoromethane	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	Vinyl chloride	Validation Flag	UJ	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	cis-1,2-Dichloroethene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	cis-1,2-Dichloroethene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	cis-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	cis-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	m,p-Xylene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	m,p-Xylene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	o-Xylene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	o-Xylene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	trans-1,2-Dichloroethene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	trans-1,2-Dichloroethene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	7/2/12 4:05 PM	
JRWT6DL	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	7/2/12 4:05 PM	

Method: BNA_SIM

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWS6	Water	Acenaphthene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Acenaphthylene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Anthracene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Benzo(a)pyrene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Benzo(b)fluoranthene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Benzo(g,h,i)perylene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Benzo(k)fluoranthene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Chrysene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Dibenzo(a,h)anthracene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Fluoranthene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Fluorene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Naphthalene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Phenanthrene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	
JRWS6	Water	Pyrene	Validation Flag	U	UJ	Donald Brown	7/2/12 5:59 PM	



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Global Environmental Specialists

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MEMORANDUM

DATE: August 21, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 3 water samples (field and QA) collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Trace Volatile Organic Compounds (TVOCs), TVOCs by Selective Ion Monitoring (SIM), Semivolatile Organic Compounds (SVOCs), SVOCs-SIM, and Aroclors (EPA CLP SOW SOM01.2) were performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered: JRWT7 JRWT8 JRWT9

No discrepancies were noted. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.

The benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, di-n-butyl phthalate, and bis(2-ethylhexyl)phthalate results in sample JRWT7 were qualified as not detected (U) based on rinsate blank contamination.



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

August 2, 2012

Reply to: Donald M. Brown
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Organic Analyses of the Water Samples Collected from the Jefferson Avenue Site - Case Number 42684, SDG JRWT7

From: Donald M. Brown, QA Chemist ^{DMB}
USEPA Region 10, Office of Environmental Assessment, Environmental Services Unit

To: Joanne LaBaw, Site Assessment Manager
USEPA Region 10, Office of Environmental Cleanup

CC: Rence Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of one (1) water sample, one (1) rinsate blank, and one (1) trip blank collected from the above referenced site has been completed. The trip blank was analyzed for Trace Volatile Organic Compounds (TVOCs) and TVOCs using Selective Ion Monitoring (SIM) only. The remaining samples were analyzed for TVOCs, TVOCs by SIM, Semivolatile Organic Compounds (SVOCs), SVOCs by SIM, and Aroclors. All samples were analyzed by A4 Scientific, Inc. located in The Woodlands, Texas. As requested by the project, there were two modifications to the analyses. One modification (under Modification Reference Number 1978.2) required the laboratory to analyze thirteen TVOCs using SIM analysis at a Contract Required Quantitation Limit (CRQL) of 0.20 µg/L if the result was undetected or detected below the CRQL in the full scan analysis. The second modification (under Modification Reference Number 1930.2) required the laboratory to analyze all Aroclors at a CRQL of 0.10 µg/L.

All sample analyses were evaluated following EPA's Stage 3 Data Validation Electronic Process (S3VE). The validation was conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the Jefferson Avenue Site, Targeted Brownfields Assessment (May 2012); the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2); the Contract Laboratory Program's National Functional Guidelines for Organic Data Review; and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction, and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Trace Volatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	Y*	Non-detect or < 5X Blank [†]
Trace Volatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile Organic Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Semivolatile SIM Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 5X Blank [†]
Aroclor Analysis		
Quality Control Test	Outliers?	Evaluation Criteria
Blanks	N	Non-detect or < 10X Blank

*See the Summary of Validation Qualifiers Applied section below for an explanation of qualifications affecting the data.
[†]10X Blank for ketones or solvents.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified “U” and were reported at the CRQL or at the level of detection due to method and/or storage blank contamination.

All sample data with values reported below the CRQL were qualified “J”.

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 that the analyte is present. The associated numerical result is an estimate.

Attachments:

Sample Summary Report

Analytical Sample Listing (Report #6)

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT7	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW10GW	pH:	8.8	Sample Date:	07022012	Sample Time:	12:40:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	5.0 0.58 <i>mw</i>	ug/L	1.0	J	<i>U-Q mw</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	5.0 0.9 <i>mw</i>	ug/L	1.0	J	<i>U-Q mw</i>	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0 3.0 <i>JQ</i>	ug/L	1.0	J	U JQ <i>JQ</i>	Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluorant hene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,l)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Ethyl citrate	4.2	ug/L	1.0	JN	JN	Yes	S3VE
7-Methyl-octadecane	2.2	ug/L	1.0	JN	JN	Yes	S3VE
Total Alkane TICs	7.4	ug/L	1.0	J	JN	Yes	S3VE
Pentadecanoic acid	7.4	ug/L	1.0	JN	JN	Yes	S3VE

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT7	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW10GW	pH:	7.0	Sample Date:	07022012	Sample Time:	12:40:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	UJ	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.65	ug/L	1.0		R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclotetrasiloxane, octamet...	0.73	ug/L	1.0	JN	R	No	S3VE

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT7	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW10GW	pH:	8.8	Sample Date:	07022012	Sample Time:	12:40:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	U	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.13	ug/L	1.0		U	Yes	S3VE
Benzo(k)fluoranthene	0.051	ug/L	1.0	J	U + Q m.l.s.	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.11	ug/L	1.0		U	Yes	S3VE
Dibenzo(a,h)anthracene	0.11	ug/L	1.0		U	Yes	S3VE
Benzo(g,h,i)perylene	0.10	ug/L	1.0		U	Yes	S3VE

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT7	Method:	VOA_SIM	Matrix:	Water	MA Number:	1978.2
Sample Location:	MW10GW	pH:	2.0	Sample Date:	07022012	Sample Time:	12:40:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No: 42684	Contract: EPW10018	SDG No: JRWT7	Lab Code: A4
Sample Number: JRWT7	Method: Aroclor	Matrix: Water	MA Number: 1930.2
Sample Location: MW10GW	pH: 8.8	Sample Date: 07022012	Sample Time: 12:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No: 42684	Contract: EPW10018	SDG No: JRWT7	Lab Code: A4
Sample Number: JRWT8	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: RS03WT	pH: 2.0	Sample Date: 07022012	Sample Time: 14:30:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No: 42684	Contract: EPW10018	SDG No: JRWT7	Lab Code: A4
Sample Number: JRWT8	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: RS03WT	pH: 7.0	Sample Date: 07022012	Sample Time: 14:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Bromochloromet hane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Chloroform	0.50	ug/L	1.0	J	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichlorom ethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloromethane	0.50	ug/L	1.0	U	UJ	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	UJ	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT8	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	RS03WT	pH:	7.1	Sample Date:	07022012	Sample Time:	14:30:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	ug/L	1.0	U	U	Yes	S3VE
Phenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-Chloroethyl)ether	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,2'-Oxybis(1-chloropropane)	5.0	ug/L	1.0	U	U	Yes	S3VE
Acetophenone	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
N-Nitroso-di-n-propylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachloroethane	5.0	ug/L	1.0	U	U	Yes	S3VE
Nitrobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Isophorone	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Nitrophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dimethylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Bis(2-chloroethoxy)methane	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Naphthalene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chloroaniline	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobutadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
Caprolactam	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Chloro-3-methylphenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	5.0	ug/L	1.0	U	R	No	S3VE
Hexachlorocyclopentadiene	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,6-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4,5-Trichlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
1,1'-Biphenyl	5.0	ug/L	1.0	U	U	Yes	S3VE
2-Chloronaphthalene	5.0	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Dimethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
2,6-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	5.0	ug/L	1.0	U	R	No	S3VE
3-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	5.0	ug/L	1.0	U	R	No	S3VE
2,4-Dinitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
4-Nitrophenol	10	ug/L	1.0	U	U	Yes	S3VE
Dibenzofuran	5.0	ug/L	1.0	U	U	Yes	S3VE
2,4-Dinitrotoluene	5.0	ug/L	1.0	U	U	Yes	S3VE
Diethylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Fluorene	5.0	ug/L	1.0	U	R	No	S3VE
4-Chlorophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Nitroaniline	10	ug/L	1.0	U	U	Yes	S3VE
4,6-Dinitro-2-methylphenol	10	ug/L	1.0	U	U	Yes	S3VE
N-Nitrosodiphenylamine	5.0	ug/L	1.0	U	U	Yes	S3VE
1,2,4,5-Tetrachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
4-Bromophenylphenylether	5.0	ug/L	1.0	U	U	Yes	S3VE
Hexachlorobenzene	5.0	ug/L	1.0	U	U	Yes	S3VE
Atrazine	5.0	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	10	ug/L	1.0	U	R	No	S3VE
Phenanthrene	5.0	ug/L	1.0	U	R	No	S3VE
Anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Carbazole	5.0	ug/L	1.0	U	U	Yes	S3VE
Di-n-butylphthalate	0.58	ug/L	1.0	J	J <i>Q</i>	Yes	S3VE
Fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Butylbenzylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
3,3'-Dichlorobenzidine	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Chrysene	5.0	ug/L	1.0	U	R	No	S3VE
Bis(2-ethylhexyl)	5.4	ug/L	1.0			Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.4	ug/L	1.0			Yes	S3VE
Di-n-octylphthalate	5.0	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(k)fluoranthene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(a)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Indeno(1,2,3-cd)pyrene	5.0	ug/L	1.0	U	R	No	S3VE
Dibenzo(a,h)anthracene	5.0	ug/L	1.0	U	R	No	S3VE
Benzo(g,h,i)perylene	5.0	ug/L	1.0	U	R	No	S3VE
2,3,4,6-Tetrachlorophenol	5.0	ug/L	1.0	U	U	Yes	S3VE
Ethyl citrate	22	ug/L	1.0	JN	JN	Yes	S3VE
Octadecanoic acid	7.5	ug/L	1.0	JN	JN	Yes	S3VE

Case No: 42684	Contract: EPW10018	SDG No: JRWT7	Lab Code: A4
Sample Number: JRWT8	Method: Aroclor	Matrix: Water	MA Number: 1930.2
Sample Location: RS03WT	pH: 7.1	Sample Date: 07022012	Sample Time: 14:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aroclor-1016	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1221	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1232	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1242	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1248	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1254	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1260	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1262	0.10	ug/L	1.0	U	U	Yes	S3VE
Aroclor-1268	0.10	ug/L	1.0	U	U	Yes	S3VE

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT8	Method:	BNA_SIM	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	RS03WT	pH:	7.1	Sample Date:	07022012	Sample Time:	14:30:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Naphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
2-Methylnaphthalene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthylene	0.10	ug/L	1.0	U	U	Yes	S3VE
Acenaphthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluorene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pentachlorophenol	0.20	ug/L	1.0	U	U	Yes	S3VE
Phenanthrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Fluoranthene	0.10	ug/L	1.0	U	U	Yes	S3VE
Pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(a)anthracene	0.10	ug/L	1.0	U	U	Yes	S3VE
Chrysene	0.10	ug/L	1.0	U	U	Yes	S3VE
Benzo(b)fluoranthene	0.15	ug/L	1.0			Yes	S3VE
Benzo(k)fluoranthene	0.047	ug/L	1.0	J	J <i>Qmw</i>	Yes	S3VE
Benzo(a)pyrene	0.10	ug/L	1.0	U	U	Yes	S3VE
Indeno(1,2,3-cd)pyrene	0.15	ug/L	1.0			Yes	S3VE
Dibenzo(a,h)anthracene	0.11	ug/L	1.0			Yes	S3VE
Benzo(g,h,i)perylene	0.12	ug/L	1.0			Yes	S3VE

Case No: 42684	Contract: EPW10018	SDG No: JRWT7	Lab Code: A4
Sample Number: JRWT9	Method: VOA_SIM	Matrix: Water	MA Number: 1978.2
Sample Location: TB04WT	pH: 2.0	Sample Date: 07022012	Sample Time: 10:25:00
% Moisture:	% Solids:		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Vinyl chloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.20	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.20	ug/L	1.0	U	U	Yes	S3VE
Benzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.20	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.20	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.20	ug/L	1.0	U	U	Yes	S3VE

Case No:	42684	Contract:	EPW10018	SDG No:	JRWT7	Lab Code:	A4
Sample Number:	JRWT9	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	TB04WT	pH:	7.0	Sample Date:	07022012	Sample Time:	10:25:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Vinyl chloride	0.50	ug/L	1.0	U	R	No	S3VE
Bromomethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Trichlorofluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Acetone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Carbon Disulfide	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl acetate	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylene chloride	0.50	ug/L	1.0	JB	U	Yes	S3VE
trans-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
2-Butanone	5.0	ug/L	1.0	U	UJ	Yes	S3VE
Bromochloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Chloroform	0.50	ug/L	1.0	J	R	No	S3VE
1,1,1-Trichloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
Cyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	0.50	ug/L	1.0	U	R	No	S3VE
Benzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Trichloroethene	0.50	ug/L	1.0	U	U	Yes	S3VE
Methylcyclohexane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	0.50	ug/L	1.0	U	R	No	S3VE
Bromodichloromethane	0.50	ug/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
cis-1,3-Dichloropropene	0.50	ug/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Toluene	0.50	ug/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	0.50	ug/L	1.0	U	R	No	S3VE
1,1,2-Trichloroethane	0.50	ug/L	1.0	U	R	No	S3VE
Tetrachloroethene	0.50	ug/L	1.0	U	R	No	S3VE
2-Hexanone	5.0	ug/L	1.0	U	U	Yes	S3VE
Dibromochloroethane	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	0.50	ug/L	1.0	U	R	No	S3VE
Chlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
Ethylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
o-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
m,p-Xylene	0.50	ug/L	1.0	U	U	Yes	S3VE
Styrene	0.50	ug/L	1.0	U	U	Yes	S3VE
Bromoform	0.50	ug/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	0.50	ug/L	1.0	U	R	No	S3VE
1,3-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	0.50	ug/L	1.0	U	R	No	S3VE
1,2-Dichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	0.50	ug/L	1.0	U	R	No	S3VE
1,2,4-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	0.50	ug/L	1.0	U	U	Yes	S3VE

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWT7 Case 42684 Contract EPW10018 Region 10 DDTID 156096 SOW SOM01.2

Analytical Sample Listing

VOA_Trace

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWT7	Field_Sample	Water	Trace	07022012 12:40:00	07062012 10:00:00			07092012 15:26:00	DB-624	C-5973
JRWT7MS	Matrix_Spike	Water	Trace	07022012 12:40:00	07062012 10:00:00			07092012 15:53:00	DB-624	C-5973
JRWT7MSD	Matrix_Spike_Duplicate	Water	Trace	07022012 12:40:00	07062012 10:00:00			07092012 16:19:00	DB-624	C-5973
JRWT8	Field_Sample	Water	Trace	07022012 14:30:00	07062012 10:00:00			07092012 16:45:00	DB-624	C-5973
JRWT9	Field_Sample	Water	Trace	07022012 10:25:00	07062012 10:00:00			07092012 17:12:00	DB-624	C-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWT7 Case 42684 Contract EPW10018 Region 10 DDTID 156096 SOW SOM01.2

Analytical Sample Listing

VOA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWT7	Field_Sample	Water		07022012 12:40:00	07062012 10:00:00			07092012 12:28:00	DB-624	H-5975
JRWT8	Field_Sample	Water		07022012 14:30:00	07062012 10:00:00			07092012 12:59:00	DB-624	H-5975
JRWT9	Field_Sample	Water		07022012 10:25:00	07062012 10:00:00			07092012 13:25:00	DB-624	H-5975

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWT7 Case 42684 Contract EPW10018 Region 10 DDTID 156096 SOW SOM01.2

Analytical Sample Listing

BNA

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWT7	Field_Sample	Water	Low	07022012 12:40:00	07062012 10:00:00	Liq_Liq	07092012 10:30:00	07112012 22:19:00	HP-5MS	E-5973
JRWT8	Field_Sample	Water	Low	07022012 14:30:00	07062012 10:00:00	Liq_Liq	07092012 10:30:00	07112012 22:51:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWT7 Case 42684 Contract EPW10018 Region 10 DDTID 156096 SOW SOM01.2

Analytical Sample Listing

BNA_SIM

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWT7	Field_Sample	Water		07022012 12:40:00	07062012 10:00:00	Liq_Liq	07092012 10:30:00	07122012 11:00:00	HP-5MS	E-5973
JRWT8	Field_Sample	Water		07022012 14:30:00	07062012 10:00:00	Liq_Liq	07092012 10:30:00	07122012 11:31:00	HP-5MS	E-5973

National Functional Guidelines Report #06

Lab A4(A4 SCIENTIFIC, INC.) SDG JRWT7 Case 42684 Contract EPW10018 Region 10 DDTID 156096 SOW SOM01.2

Analytical Sample Listing

Aroclor

Sample Number	Sample Type	Matrix	Level	Sampling Date	Date Received	Extraction		Analysis		
						Type	Date/Time	Date/Time	GC Column	Instrument
JRWT7	Field_Sample	Water		07022012 12:40:00	07062012 10:00:00	Sep_Funnel	07092012 10:30:00	07162012 15:44:10	DB-XLB	F-6890A
JRWT7	Field_Sample	Water		07022012 12:40:00	07062012 10:00:00	Sep_Funnel	07092012 10:30:00	07162012 16:14:01	DB-35MS	F-6890B
JRWT8	Field_Sample	Water		07022012 14:30:00	07062012 10:00:00	Sep_Funnel	07092012 10:30:00	07162012 16:14:01	DB-XLB	F-6890A
JRWT8	Field_Sample	Water		07022012 14:30:00	07062012 10:00:00	Sep_Funnel	07092012 10:30:00	07162012 16:43:52	DB-35MS	F-6890B

Edit History Report

Case No: 42684

Contract: EPW10018

SDG No: JRWT7

Lab Code: A4

Method: VOA_Trace

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT7	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dibromoethane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dichloroethane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Benzene	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Benzene	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Carbon tetrachloride	Validation Flag	UJ	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Chloroform	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Chloroform	Validation Flag		R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Cyclotetrasiloxane, octamet...	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Cyclotetrasiloxane, octamet...	Validation Flag	JN	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Methylene chloride	Validation Flag	UJ	U	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	8/2/12 10:23 AM	
JRWT7	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	8/2/12 10:23 AM	
JRWT8	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT8	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Benzene	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Benzene	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Chloroform	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Chloroform	Validation Flag	UJ	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Tetrachloroethene	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	8/2/12 10:26 AM	
JRWT8	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	8/2/12 10:26 AM	
JRWT9	Water	1,1,2,2-Tetrachloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,1,2-Trichloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,1,2-Trichloroethane	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dibromo-3-chloropropane	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dibromoethane	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dibromoethane	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dichloroethane	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dichloroethane	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dichloropropane	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,2-Dichloropropane	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,4-Dichlorobenzene	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	1,4-Dichlorobenzene	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Benzene	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Benzene	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Carbon tetrachloride	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Carbon tetrachloride	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Chloroform	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Chloroform	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Tetrachloroethene	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Tetrachloroethene	Validation	U	R	Donald	8/2/12 10:29 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT9	Water	Tetrachloroethene	Flag	U	R	Brown	8/2/12 10:29 AM	
JRWT9	Water	Vinyl chloride	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	Vinyl chloride	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	trans-1,3-Dichloropropene	Reportable	Y	N	Donald Brown	8/2/12 10:29 AM	
JRWT9	Water	trans-1,3-Dichloropropene	Validation Flag	U	R	Donald Brown	8/2/12 10:29 AM	

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT7	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Acenaphthene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Anthracene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Anthracene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Chrysene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Chrysene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Fluoranthene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Fluorene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Fluorene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT7	Water	Naphthalene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Naphthalene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Pentachlorophenol	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Phenanthrene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Pyrene	Reportable	Y	N	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Pyrene	Validation Flag	U	R	Donald Brown	8/2/12 12:17 PM	
JRWT7	Water	Total Alkane TICs	Validation Flag	J	JN	Donald Brown	8/2/12 12:17 PM	
JRWT8	Water	2-Methylnaphthalene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	2-Methylnaphthalene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Acenaphthene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Acenaphthene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Acenaphthylene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Acenaphthylene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Anthracene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Anthracene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(a)anthracene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(a)anthracene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(a)pyrene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(a)pyrene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(b)fluoranthene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(b)fluoranthene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(g,h,i)perylene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(k)fluoranthene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Benzo(k)fluoranthene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Chrysene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Chrysene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Di-n-butylphthalate	Validated Result	0.57	0.58	Donald Brown	8/2/12 1:43 PM	
JRWT8	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Dibenzo(a,h)anthracene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Fluoranthene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Fluoranthene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Fluorene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Fluorene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Indeno(1,2,3-cd)pyrene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Naphthalene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Naphthalene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Pentachlorophenol	Reportable	Y	N	Donald	8/2/12 12:20 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JRWT8	Water	Pentachlorophenol	Reportable	Y	N	Brown	8/2/12 12:20 PM	
JRWT8	Water	Pentachlorophenol	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Phenanthrene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Phenanthrene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Pyrene	Reportable	Y	N	Donald Brown	8/2/12 12:20 PM	
JRWT8	Water	Pyrene	Validation Flag	U	R	Donald Brown	8/2/12 12:20 PM	



ecology and environment, inc.

Global Environmental Specialists

720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 27, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 8 soil samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for total metals (EPA CLP SOW ISM01.3) were performed by Bonner Analytical, Hattiesburg, Mississippi.

The samples were numbered:

MJRWM3	MJRWM6	MJRWM7	MJRWM8	MJRWQ7
MJRWQ8	MJRWS2	MJRWS3		

No discrepancies were noted. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

June 25, 2012

Reply To
Attn. Of: OEA-095

MEMORANDUM

SUBJECT: Data Review of Metals Analysis for the Jefferson Avenue Site Targeted Brownfields Assessment - Case 42569, SDG: MJRWM3

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

TO: Joanne LaBaw, Project Manager

CC: Renee Nordeen, Ecology & Environment, Inc.,

The quality assurance (QA) review of the analytical data generated from the analysis of eight (8) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by the Bonner Analytical, located in Hattiesburg, MS. All sample analyses were evaluated following EPA's Stage 2 Data Validation Electronic Process (S2BVE). Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of quality control results for this sample set is as follows:

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	Y*	Non-detect or <10% of Sample
Matrix Spike (MJRWM6)	76 - 100%	Y*	75 - 125%
Sample Duplicate (MJRWM6)	≤ 10%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	85 - 124%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJRWM6)	≤ 10%	Y*	≤ 10% Difference

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified (U) and the values raised to the CRQLs due to preparation and/or instrument blank contamination.

All sample data with values reported below the CRQL were qualified (J).

Matrix Spikes: Antimony (21%), beryllium (74%) and manganese (73%) recoveries were low (with all post spike recoveries >75%) and the data qualified (J or UJ). Values for these analytes may be biased low.

Serial Dilution: Barium (11%), calcium (13%), cobalt (11%), copper (12%), iron (15%), magnesium (12%) and sodium (11%) percent differences were high and the serial dilution values lower than initial sample results. Data were qualified (J or UJ) and detected values for these analytes may be biased low.

Sample Summary Report

Case No: 42569	Contract: EPW09037	SDG No: MJRWM3	Lab Code: BONNER
Sample Number: MJRWM3	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214502	pH:	Sample Date: 05212012	Sample Time: 09:30:00
% Moisture :		% Solids : 90.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	11400	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	1.7	mg/kg	1			Yes	S2BVE
Barium	51.6	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.55	mg/kg	1	U	U	Yes	S2BVE
Calcium	6120	mg/kg	1	E	J	Yes	S2BVE
Chromium	25.8	mg/kg	1			Yes	S2BVE
Cobalt	9.0	mg/kg	1	E	J	Yes	S2BVE
Copper	13.5	mg/kg	1	E	J	Yes	S2BVE
Iron	15700	mg/kg	1	E	J	Yes	S2BVE
Lead	2.0	mg/kg	1			Yes	S2BVE
Magnesium	4910	mg/kg	1	E	J	Yes	S2BVE
Manganese	210	mg/kg	1	N	J	Yes	S2BVE
Nickel	34.5	mg/kg	1			Yes	S2BVE
Potassium	707	mg/kg	1			Yes	S2BVE
Selenium	0.55	mg/kg	1	J	J <i>QMU</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	554	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.8	mg/kg	1	U	U	Yes	S2BVE
Vanadium	42.9	mg/kg	1			Yes	S2BVE
Zinc	35.0	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM3	Lab Code:	BONNER
Sample Number:	MJRWM6	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214505	pH:		Sample Date:	05212012	Sample Time:	11:02:00
% Moisture :				% Solids :	90.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10000	mg/kg	1			Yes	S2BVE
Antimony	6.6	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	3.1	mg/kg	1			Yes	S2BVE
Barium	41.0	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.55	mg/kg	1	U	U	Yes	S2BVE
Calcium	5580	mg/kg	1	E	J	Yes	S2BVE
Chromium	28.8	mg/kg	1			Yes	S2BVE
Cobalt	8.9	mg/kg	1	E	J	Yes	S2BVE
Copper	11.1	mg/kg	1	E	J	Yes	S2BVE
Iron	14900	mg/kg	1	E	J	Yes	S2BVE
Lead	1.9	mg/kg	1			Yes	S2BVE
Magnesium	4930	mg/kg	1	E	J	Yes	S2BVE
Manganese	261	mg/kg	1	N	J	Yes	S2BVE
Nickel	44.2	mg/kg	1			Yes	S2BVE
Potassium	664	mg/kg	1			Yes	S2BVE
Selenium	0.53	mg/kg	1	J	J <i>Qm</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	552	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.8	mg/kg	1	U	U	Yes	S2BVE
Vanadium	38.4	mg/kg	1			Yes	S2BVE
Zinc	30.8	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWM3	Lab Code: BONNER
Sample Number: MJRWM7	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214506	pH:	Sample Date: 05212012	Sample Time: 11:29:00
% Moisture :		% Solids : 92.3	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9850	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.6	mg/kg	1			Yes	S2BVE
Barium	39.0	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	U	U	Yes	S2BVE
Calcium	5000	mg/kg	1	E	J	Yes	S2BVE
Chromium	22.0	mg/kg	1			Yes	S2BVE
Cobalt	7.8	mg/kg	1	E	J	Yes	S2BVE
Copper	11.7	mg/kg	1	E	J	Yes	S2BVE
Iron	15000	mg/kg	1	E	J	Yes	S2BVE
Lead	2.3	mg/kg	1			Yes	S2BVE
Magnesium	4500	mg/kg	1	E	J	Yes	S2BVE
Manganese	235	mg/kg	1	N	J	Yes	S2BVE
Nickel	31.8	mg/kg	1			Yes	S2BVE
Potassium	706	mg/kg	1			Yes	S2BVE
Selenium	0.53	mg/kg	1	J	J <i>Qme</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	542	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.7	mg/kg	1	U	U	Yes	S2BVE
Vanadium	36.6	mg/kg	1			Yes	S2BVE
Zinc	31.8	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWM3	Lab.Code: BONNER
Sample Number: MJRWM8	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214507	pH:	Sample Date: 05212012	Sample Time: 11:53:00
% Moisture :		% Solids : 90.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9300	mg/kg	1			Yes	S2BVE
Antimony	6.6	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.6	mg/kg	1			Yes	S2BVE
Barium	44.4	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.55	mg/kg	1	U	U	Yes	S2BVE
Calcium	4950	mg/kg	1	E	J	Yes	S2BVE
Chromium	24.4	mg/kg	1			Yes	S2BVE
Cobalt	8.3	mg/kg	1	E	J	Yes	S2BVE
Copper	12.4	mg/kg	1	E	J	Yes	S2BVE
Iron	15000	mg/kg	1	E	J	Yes	S2BVE
Lead	2.0	mg/kg	1			Yes	S2BVE
Magnesium	4120	mg/kg	1	E	J	Yes	S2BVE
Manganese	437	mg/kg	1	N	J	Yes	S2BVE
Nickel	27.8	mg/kg	1			Yes	S2BVE
Potassium	633	mg/kg	1			Yes	S2BVE
Selenium	0.59	mg/kg	1	J	J <i>QAW</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	551	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.8	mg/kg	1	U	U	Yes	S2BVE
Vanadium	39.1	mg/kg	1			Yes	S2BVE
Zinc	30.9	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRW3	Lab Code:	BONNER
Sample Number:	MJRWQ7	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214536	pH:		Sample Date:	05232012	Sample Time:	14:26:00
% Moisture :		% Solids :	92.4				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10100	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	1.9	mg/kg	1			Yes	S2BVE
Barium	45.3	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	U	U	Yes	S2BVE
Calcium	5650	mg/kg	1	E	J	Yes	S2BVE
Chromium	24.9	mg/kg	1			Yes	S2BVE
Cobalt	8.2	mg/kg	1	E	J	Yes	S2BVE
Copper	11.7	mg/kg	1	E	J	Yes	S2BVE
Iron	15600	mg/kg	1	E	J	Yes	S2BVE
Lead	2.2	mg/kg	1			Yes	S2BVE
Magnesium	5830	mg/kg	1	E	J	Yes	S2BVE
Manganese	274	mg/kg	1	N	J	Yes	S2BVE
Nickel	32.8	mg/kg	1			Yes	S2BVE
Potassium	923	mg/kg	1			Yes	S2BVE
Selenium	0.61	mg/kg	1	J	J <i>Q</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	541	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.7	mg/kg	1	U	U	Yes	S2BVE
Vanadium	38.2	mg/kg	1			Yes	S2BVE
Zinc	33.1	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWM3	Lab Code: BONNER
Sample Number: MJRWQ8	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214537	pH:	Sample Date: 05232012	Sample Time: 14:45:00
% Moisture:		% Solids: 87.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	8970	mg/kg	1			Yes	S2BVE
Antimony	6.8	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.3	mg/kg	1			Yes	S2BVE
Barium	36.1	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.57	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.57	mg/kg	1	U	U	Yes	S2BVE
Calcium	5310	mg/kg	1	E	J	Yes	S2BVE
Chromium	24.9	mg/kg	1			Yes	S2BVE
Cobalt	7.0	mg/kg	1	E	J	Yes	S2BVE
Copper	10.7	mg/kg	1	E	J	Yes	S2BVE
Iron	14400	mg/kg	1	E	J	Yes	S2BVE
Lead	2.1	mg/kg	1			Yes	S2BVE
Magnesium	5020	mg/kg	1	E	J	Yes	S2BVE
Manganese	273	mg/kg	1	N	J	Yes	S2BVE
Nickel	35.8	mg/kg	1			Yes	S2BVE
Potassium	572	mg/kg	1			Yes	S2BVE
Selenium	0.59	mg/kg	1	J	J <i>QAC</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	569	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.8	mg/kg	1	U	U	Yes	S2BVE
Vanadium	35.1	mg/kg	1			Yes	S2BVE
Zinc	30.1	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWM3	Lab Code: BONNER
Sample Number: MJRWS2	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214551	pH:	Sample Date: 05222012	Sample Time: 14:45:00
% Moisture :		% Solids : 88.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10400	mg/kg	1			Yes	S2BVE
Antimony	6.8	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.9	mg/kg	1			Yes	S2BVE
Barium	48.1	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.57	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.57	mg/kg	1	U	U	Yes	S2BVE
Calcium	6170	mg/kg	1	E	J	Yes	S2BVE
Chromium	30.4	mg/kg	1			Yes	S2BVE
Cobalt	8.5	mg/kg	1	E	J	Yes	S2BVE
Copper	12.9	mg/kg	1	E	J	Yes	S2BVE
Iron	14900	mg/kg	1	E	J	Yes	S2BVE
Lead	6.3	mg/kg	1			Yes	S2BVE
Magnesium	5970	mg/kg	1	E	J	Yes	S2BVE
Manganese	268	mg/kg	1	N	J	Yes	S2BVE
Nickel	46.5	mg/kg	1			Yes	S2BVE
Potassium	767	mg/kg	1			Yes	S2BVE
Selenium	0.63	mg/kg	1	J	J 	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	568	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.8	mg/kg	1	U	U	Yes	S2BVE
Vanadium	39.7	mg/kg	1			Yes	S2BVE
Zinc	39.1	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWM3	Lab Code: BONNER
Sample Number: MJRWS3	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214552	pH:	Sample Date: 05222012	Sample Time: 15:00:00
% Moisture :		% Solids : 89.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10200	mg/kg	1			Yes	S2BVE
Antimony	6.7	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.6	mg/kg	1			Yes	S2BVE
Barium	49.3	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.56	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.046	mg/kg	1	J	J <i>Qm</i>	Yes	S2BVE
Calcium	6900	mg/kg	1	E	J	Yes	S2BVE
Chromium	27.1	mg/kg	1			Yes	S2BVE
Cobalt	7.6	mg/kg	1	E	J	Yes	S2BVE
Copper	14.1	mg/kg	1	E	J	Yes	S2BVE
Iron	14900	mg/kg	1	E	J	Yes	S2BVE
Lead	16.6	mg/kg	1			Yes	S2BVE
Magnesium	5030	mg/kg	1	E	J	Yes	S2BVE
Manganese	272	mg/kg	1	N	J	Yes	S2BVE
Nickel	33.5	mg/kg	1			Yes	S2BVE
Potassium	722	mg/kg	1			Yes	S2BVE
Selenium	0.62	mg/kg	1	J	J <i>Qm</i>	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	558	mg/kg	1	JE	UJ	Yes	S2BVE
Thallium	2.8	mg/kg	1	U	U	Yes	S2BVE
Vanadium	39.1	mg/kg	1			Yes	S2BVE
Zinc	61.1	mg/kg	1			Yes	S2BVE

Edit History Report

Case No: 42569

Contract: EPW09037

SDG No: MJRWM3

Lab Code: BONNER

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJRWM3	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 6:58 PM	
MJRWM3	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 6:58 PM	
MJRWM6	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 6:58 PM	
MJRWM6	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 6:58 PM	
MJRWM7	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 6:59 PM	
MJRWM7	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 6:59 PM	
MJRWM8	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 6:59 PM	
MJRWM8	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 6:59 PM	
MJRWQ7	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 7:00 PM	
MJRWQ7	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 7:00 PM	
MJRWQ8	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 7:00 PM	
MJRWQ8	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 7:00 PM	
MJRWS2	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 7:00 PM	
MJRWS2	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 7:00 PM	
MJRWS3	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/25/12 7:01 PM	
MJRWS3	Soil	Manganese	Validation Flag	J-	J	Donald Matheny	6/25/12 7:01 PM	



ecology and environment, inc.

Global Environmental Specialists

720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 27, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 10 soil/sediment samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for total metals (EPA CLP SOW ISM01.3) were performed by Bonner Analytical, Hattiesburg, Mississippi.

The samples were numbered:

MJRWM1	MJRWM2	MJRWQ2	MJRWQ3	MJRWQ4
MJRWQ6	MJRWR0	MJRWR1	MJRWR2	MJRWS1

No discrepancies were noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

June 21, 2012

Reply To
Attn. Of: OEA-095

MEMORANDUM

SUBJECT: Data Review of Metals Analysis for the Jefferson Avenue Site Targeted Brownfields Assessment - Case 42569, SDG: MJRW1

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

TO: Joanne LaBaw, Project Manager

CC: Renee Nordeen, Ecology & Environment, Inc.,

The quality assurance (QA) review of the analytical data generated from the analysis of ten (10) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by the Bonner Analytical, located in Hattiesburg, MS. All sample analyses were evaluated following EPA's Stage 2 Data Validation Electronic Process (S2BVE). Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of quality control results for this sample set is as follows:

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	Y*	Non-detect or <10% of Sample
Matrix Spike (MJRWQ2)	76 - 100%	Y*	75 - 125%
Sample Duplicate (MJRWQ2)	≤ 19%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	80 - 130%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJRWQ2)	≤ 9%	Y*	≤ 10% Difference

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified (U) and the values raised to the CRQLs due to preparation and/or instrument blank contamination.

Matrix Spikes: Antimony (16%), beryllium (71%), cadmium (72%), lead (72%), selenium (68%) and thallium (71%) recoveries were low (with all post spike recoveries >75%) and the data qualified (J or UJ). Values for these analytes may be biased low with the exception of lead. Potential bias for lead could not be determined.

Serial Dilution: Barium (16%), calcium (18%), chromium (14%), cobalt (19%), copper (13%), iron (20%), lead (15%), magnesium (18%), manganese (13%) and potassium (16%) percent differences were high and the serial dilution values lower than initial sample results. Data were qualified (J or UJ) and detected values for these analytes may be biased low with the exception of lead. Potential bias for lead could not be determined.

Sample Summary Report

Case No: 42569	Contract: EPW09037	SDG No: MJRWM1	Lab Code: BONNER
Sample Number: MJRWM1	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214500	pH:	Sample Date: 05212012	Sample Time: 08:30:00
% Moisture :		% Solids : 88.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9190	mg/kg	1			Yes	S2BVE
Antimony	6.8	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.6	mg/kg	1			Yes	S2BVE
Barium	42.4	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.57	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.57	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	4750	mg/kg	1	E	J	Yes	S2BVE
Chromium	26.3	mg/kg	1	E	J	Yes	S2BVE
Cobalt	7.6	mg/kg	1	E	J	Yes	S2BVE
Copper	11.2	mg/kg	1	E	J	Yes	S2BVE
Iron	14300	mg/kg	1	E	J	Yes	S2BVE
Lead	2.3	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	4940	mg/kg	1	E	J	Yes	S2BVE
Manganese	291	mg/kg	1	E	J	Yes	S2BVE
Nickel	40.2	mg/kg	1			Yes	S2BVE
Potassium	683	mg/kg	1	E	J	Yes	S2BVE
Selenium	4.0	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	568	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	33.8	mg/kg	1			Yes	S2BVE
Zinc	31.0	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM1	Lab Code:	BONNER
Sample Number:	MJRWM2	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214501	pH:		Sample Date:	05212012	Sample Time:	09:00:00
% Moisture :		% Solids :			90.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10100	mg/kg	1			Yes	S2BVE
Antimony	6.6	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.6	mg/kg	1			Yes	S2BVE
Barium	62.0	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.55	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	4700	mg/kg	1	E	J	Yes	S2BVE
Chromium	27.7	mg/kg	1	E	J	Yes	S2BVE
Cobalt	8.3	mg/kg	1	E	J	Yes	S2BVE
Copper	13.4	mg/kg	1	E	J	Yes	S2BVE
Iron	15300	mg/kg	1	E	J	Yes	S2BVE
Lead	2.9	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	5270	mg/kg	1	E	J	Yes	S2BVE
Manganese	238	mg/kg	1	E	J	Yes	S2BVE
Nickel	39.2	mg/kg	1			Yes	S2BVE
Potassium	859	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.9	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	554	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.8	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	34.9	mg/kg	1			Yes	S2BVE
Zinc	36.4	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM1	Lab Code:	BONNER
Sample Number:	MJRWQ2	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214531	pH:		Sample Date:	05232012	Sample Time:	10:15:00
% Moisture :		% Solids :	93.2				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	11700	mg/kg	1			Yes	S2BVE
Antimony	6.4	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	4.2	mg/kg	1			Yes	S2BVE
Barium	50.3	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	7270	mg/kg	1	E	J	Yes	S2BVE
Chromium	26.7	mg/kg	1	E	J	Yes	S2BVE
Cobalt	8.7	mg/kg	1	E	J	Yes	S2BVE
Copper	15.2	mg/kg	1	E	J	Yes	S2BVE
Iron	16100	mg/kg	1	E	J	Yes	S2BVE
Lead	6.2	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	4960	mg/kg	1	E	J	Yes	S2BVE
Manganese	322	mg/kg	1	E	J	Yes	S2BVE
Nickel	33.6	mg/kg	1			Yes	S2BVE
Potassium	881	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	536	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	42.2	mg/kg	1			Yes	S2BVE
Zinc	44.1	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM1	Lab Code:	BONNER
Sample Number:	MJRWQ3	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214532	pH:		Sample Date:	05232012	Sample Time:	10:25:00
% Moisture :				% Solids :	92.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	11000	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	4.6	mg/kg	1			Yes	S2BVE
Barium	48.0	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	6370	mg/kg	1	E	J	Yes	S2BVE
Chromium	28.8	mg/kg	1	E	J	Yes	S2BVE
Cobalt	8.3	mg/kg	1	E	J	Yes	S2BVE
Copper	16.2	mg/kg	1	E	J	Yes	S2BVE
Iron	17300	mg/kg	1	E	J	Yes	S2BVE
Lead	5.3	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	6130	mg/kg	1	E	J	Yes	S2BVE
Manganese	363	mg/kg	1	E	J	Yes	S2BVE
Nickel	37.3	mg/kg	1			Yes	S2BVE
Potassium	799	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	542	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	39.0	mg/kg	1			Yes	S2BVE
Zinc	43.9	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM1	Lab Code:	BONNER
Sample Number:	MJRWQ4	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214533	pH:		Sample Date:	05232012	Sample Time:	10:30:00
% Moisture :				% Solids :	92.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9500	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	1.9	mg/kg	1			Yes	S2BVE
Barium	50.7	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	16900	mg/kg	1	E	J	Yes	S2BVE
Chromium	27.2	mg/kg	1	E	J	Yes	S2BVE
Cobalt	7.1	mg/kg	1	E	J	Yes	S2BVE
Copper	12.7	mg/kg	1	E	J	Yes	S2BVE
Iron	14700	mg/kg	1	E	J	Yes	S2BVE
Lead	2.8	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	6130	mg/kg	1	E	J	Yes	S2BVE
Manganese	324	mg/kg	1	E	J	Yes	S2BVE
Nickel	31.6	mg/kg	1			Yes	S2BVE
Potassium	895	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	541	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	33.9	mg/kg	1			Yes	S2BVE
Zinc	34.5	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM1	Lab Code:	BONNER
Sample Number:	MJRWQ6	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214535	pH:		Sample Date:	05232012	Sample Time:	14:14:00
% Moisture :		% Solids :	92.5				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9810	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.1	mg/kg	1			Yes	S2BVE
Barium	87.1	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	5080	mg/kg	1	E	J	Yes	S2BVE
Chromium	23.5	mg/kg	1	E	J	Yes	S2BVE
Cobalt	7.9	mg/kg	1	E	J	Yes	S2BVE
Copper	13.1	mg/kg	1	E	J	Yes	S2BVE
Iron	15600	mg/kg	1	E	J	Yes	S2BVE
Lead	5.3	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	5260	mg/kg	1	E	J	Yes	S2BVE
Manganese	645	mg/kg	1	E	J	Yes	S2BVE
Nickel	34.5	mg/kg	1			Yes	S2BVE
Potassium	844	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	541	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	34.7	mg/kg	1			Yes	S2BVE
Zinc	41.2	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWMI	Lab Code: BONNER
Sample Number: MJRW0	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214539	pH:	Sample Date: 05242012	Sample Time: 09:28:00
% Moisture :		% Solids : 91.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	9420	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	1.6	mg/kg	1			Yes	S2BVE
Barium	47.1	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.55	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	5620	mg/kg	1	E	J	Yes	S2BVE
Chromium	22.6	mg/kg	1	E	J	Yes	S2BVE
Cobalt	7.5	mg/kg	1	E	J	Yes	S2BVE
Copper	11.0	mg/kg	1	E	J	Yes	S2BVE
Iron	15300	mg/kg	1	E	J	Yes	S2BVE
Lead	4.0	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	5510	mg/kg	1	E	J	Yes	S2BVE
Manganese	353	mg/kg	1	E	J	Yes	S2BVE
Nickel	35.8	mg/kg	1			Yes	S2BVE
Potassium	671	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	545	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	34.0	mg/kg	1			Yes	S2BVE
Zinc	41.4	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWM1	Lab Code: BONNER
Sample Number: MJRWR1	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214540	pH:	Sample Date: 05242012	Sample Time: 09:42:00
% Moisture :		% Solids : 91.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10700	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	1.8	mg/kg	1			Yes	S2BVE
Barium	47.0	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.55	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.55	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	6310	mg/kg	1	E	J	Yes	S2BVE
Chromium	28.8	mg/kg	1	E	J	Yes	S2BVE
Cobalt	8.0	mg/kg	1	E	J	Yes	S2BVE
Copper	12.7	mg/kg	1	E	J	Yes	S2BVE
Iron	16000	mg/kg	1	E	J	Yes	S2BVE
Lead	4.6	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	5950	mg/kg	1	E	J	Yes	S2BVE
Manganese	307	mg/kg	1	E	J	Yes	S2BVE
Nickel	33.5	mg/kg	1			Yes	S2BVE
Potassium	852	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	545	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	38.4	mg/kg	1			Yes	S2BVE
Zinc	39.8	mg/kg	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWMI	Lab Code: BONNER
Sample Number: MJRW2	Method: ICP_AES	Matrix: Soil	MA Number: DEFAULT
Sample Location: 12214541	pH:	Sample Date: 05242012	Sample Time: 10:05:00
% Moisture :		% Solids : 93.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	7700	mg/kg	1			Yes	S2BVE
Antimony	6.4	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	1.8	mg/kg	1			Yes	S2BVE
Barium	26.7	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.53	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.53	mg/kg	1	UN	UJ	Yes	S2BVE
Calcium	4870	mg/kg	1	E	J	Yes	S2BVE
Chromium	19.5	mg/kg	1	E	J	Yes	S2BVE
Cobalt	5.7	mg/kg	1	E	J	Yes	S2BVE
Copper	8.4	mg/kg	1	E	J	Yes	S2BVE
Iron	11500	mg/kg	1	E	J	Yes	S2BVE
Lead	2.0	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	4460	mg/kg	1	E	J	Yes	S2BVE
Manganese	225	mg/kg	1	E	J	Yes	S2BVE
Nickel	28.7	mg/kg	1			Yes	S2BVE
Potassium	534	mg/kg	1	JE	UJ	Yes	S2BVE
Selenium	3.7	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	534	mg/kg	1	J	U	Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	27.5	mg/kg	1			Yes	S2BVE
Zinc	25.9	mg/kg	1			Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWM1	Lab Code:	BONNER
Sample Number:	MJRWS1	Method:	ICP_AES	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	12214550	pH:		Sample Date:	05222012	Sample Time:	11:15:00
% Moisture :		% Solids :	91.9				

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	10100	mg/kg	1			Yes	S2BVE
Antimony	6.5	mg/kg	1	JN	UJ	Yes	S2BVE
Arsenic	2.7	mg/kg	1			Yes	S2BVE
Barium	61.8	mg/kg	1	E	J	Yes	S2BVE
Beryllium	0.54	mg/kg	1	U*,N	UJ	Yes	S2BVE
Cadmium	0.54	mg/kg	1	JN	UJ	Yes	S2BVE
Calcium	10300	mg/kg	1	E	J	Yes	S2BVE
Chromium	20.6	mg/kg	1	E	J	Yes	S2BVE
Cobalt	7.8	mg/kg	1	E	J	Yes	S2BVE
Copper	24.1	mg/kg	1	E	J	Yes	S2BVE
Iron	15300	mg/kg	1	E	J	Yes	S2BVE
Lead	64.9	mg/kg	1	N,E	J	Yes	S2BVE
Magnesium	4860	mg/kg	1	E	J	Yes	S2BVE
Manganese	292	mg/kg	1	E	J	Yes	S2BVE
Nickel	31.4	mg/kg	1			Yes	S2BVE
Potassium	673	mg/kg	1	E	J	Yes	S2BVE
Selenium	3.8	mg/kg	1	JN	UJ	Yes	S2BVE
Silver	1.1	mg/kg	1	U	U	Yes	S2BVE
Sodium	597	mg/kg	1			Yes	S2BVE
Thallium	2.7	mg/kg	1	UN	UJ	Yes	S2BVE
Vanadium	34.4	mg/kg	1			Yes	S2BVE
Zinc	256	mg/kg	1			Yes	S2BVE

Edit History Report

Case No: 42569

Contract: EPW09037

SDG No: MJRWM1

Lab Code: BONNER

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJRWM1	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:28 PM	
MJRWM1	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:28 PM	
MJRWM1	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:28 PM	
MJRWM2	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:29 PM	
MJRWM2	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:29 PM	
MJRWM2	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:29 PM	
MJRWQ2	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:30 PM	
MJRWQ2	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:30 PM	
MJRWQ2	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:30 PM	
MJRWQ3	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:34 PM	
MJRWQ3	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:34 PM	
MJRWQ3	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:34 PM	
MJRWQ4	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:35 PM	
MJRWQ4	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:35 PM	
MJRWQ4	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:35 PM	
MJRWQ6	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:37 PM	
MJRWQ6	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:37 PM	
MJRWQ6	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:37 PM	
MJRWR0	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:38 PM	
MJRWR0	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:38 PM	
MJRWR0	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:38 PM	
MJRWR1	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:39 PM	
MJRWR1	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:39 PM	
MJRWR1	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:39 PM	
MJRWR2	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:40 PM	
MJRWR2	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:40 PM	
MJRWR2	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:40 PM	
MJRWS1	Soil	Antimony	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:41 PM	
MJRWS1	Soil	Cadmium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:57 PM	
MJRWS1	Soil	Lead	Validation Flag	J-	J	Donald Matheny	6/21/12 6:41 PM	
MJRWS1	Soil	Selenium	Validation Flag	U	UJ	Donald Matheny	6/21/12 6:41 PM	



ecology and environment, inc.

Global Environmental Specialists

720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 27, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 10 water samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for total metals (EPA CLP SOW ISM01.3) were performed by Bonner Analytical, Hattiesburg, Mississippi.

The samples were numbered:

MJRWP6	MJRWP7	MJRWP8	MJRWP9	MJRWQ0
MJRWQ1	MJRWS6	MJRWS8	MJRWS9	MJRWT1

No discrepancies were noted. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

June 21, 2012

Reply To
Attn. Of: OEA-095

MEMORANDUM

SUBJECT: Data Review of Metals Analysis for the Jefferson Avenue Site Targeted Brownfields Assessment - Case 42569, SDG: MJRWP6

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

TO: Joanne LaBaw, Project Manager

CC: Renee Nordeen, Ecology & Environment, Inc.,

The quality assurance (QA) review of the analytical data generated from the analysis of ten (10) water samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by the Bonner Analytical, located in Hattiesburg, MS. All sample analyses were evaluated following EPA's Stage 2 Data Validation Electronic Process (S2BVE). Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of quality control results for this sample set is as follows:

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	Y*	Non-detect or <10% of Sample
Matrix Spike (MJRWP6)	91 - 124%	Y*	75 - 125%
Sample Duplicate (MJRWP6)	≤ 2%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	90 - 104%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJRWP6)	≤ 8%	Y*	≤ 10% Difference

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified (U) and the values raised to the CRQLs due to preparation and/or instrument blank contamination.

All sample data with values reported below the CRQL were qualified (J).

Matrix Spikes: Aluminum (127%) and barium (132%) recoveries were slightly high and the data qualified (J). Detected values for these analytes may be biased high.

Serial Dilution: Iron (13%) and potassium (18%) percent differences were high and the serial dilution values lower than initial sample results. Data were qualified (J) and detected values for these analytes may be biased high.

Sample Summary Report

Case No: 42569	Contract: EPW09037	SDG No: MJRWP6	Lab Code: BONNER
Sample Number: MJRWP6	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214525	pH: 1	Sample Date: 05222012	Sample Time: 15:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	140	ug/L	1	JN	J	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	JN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	27700	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	J	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	219	ug/L	1	E	J	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	22100	ug/L	1			Yes	S2BVE
Manganese	19.5	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	5000	ug/L	1	JE	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	J	U	Yes	S2BVE
Sodium	13000	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWP6	Lab Code:	BONNER
Sample Number:	MJRWP7	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214526	pH:	1	Sample Date:	05222012	Sample Time:	16:25:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	UN	U	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	JN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	43900	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	200	ug/L	1	E	J	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	23400	ug/L	1			Yes	S2BVE
Manganese	687	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	5340	ug/L	1	E	J	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	15500	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWP6	Lab Code:	BONNER
Sample Number:	MJRWP8	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214527	pH:	1	Sample Date:	05222012	Sample Time:	15:45:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	163	ug/L	1	JN	JQ	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	JN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	34700	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	277	ug/L	1	E	J	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	15600	ug/L	1			Yes	S2BVE
Manganese	956	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	5000	ug/L	1	JE	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	9590	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWP6	Lab Code:	BONNER
Sample Number:	MJRWP9	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214528	pH:	1	Sample Date:	05222012	Sample Time:	15:55:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	119	ug/L	1	JN	J <i>QW</i>	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	JN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	43300	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	499	ug/L	1	E	J	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	25600	ug/L	1			Yes	S2BVE
Manganese	769	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	U	U	Yes	S2BVE
Potassium	5000	ug/L	1	JE	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	10800	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWP6	Lab Code: BONNER
Sample Number: MJRWQ0	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214529	pH: 1	Sample Date: 05222012	Sample Time: 16:05:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	144	ug/L	1	JN	J <i>QW</i>	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	JN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	J	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	41900	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	1840	ug/L	1	E	J	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	12700	ug/L	1			Yes	S2BVE
Manganese	177	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	5000	ug/L	1	JE	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	6310	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRW6	Lab Code:	BONNER
Sample Number:	MJRWQ1	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214530	pH:	1	Sample Date:	05222012	Sample Time:	16:14:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	12500	ug/L	1	N	J	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	JN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	47800	ug/L	1			Yes	S2BVE
Chromium	22.2	ug/L	1			Yes	S2BVE
Cobalt	50.0	ug/L	1	J	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	13700	ug/L	1	E	J	Yes	S2BVE
Lead	9.5	ug/L	1	J	J <i>Q</i>	Yes	S2BVE
Magnesium	26100	ug/L	1			Yes	S2BVE
Manganese	822	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	6980	ug/L	1	E	J	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	12400	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWP6	Lab Code:	BONNER
Sample Number:	MJRWS6	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214555	pH:	1	Sample Date:	05222012	Sample Time:	14:10:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	67200	ug/L	1	N	J	Yes	S2BVE
Antimony	60.0	ug/L	1	J	U	Yes	S2BVE
Arsenic	32.7	ug/L	1			Yes	S2BVE
Barium	253	ug/L	1	N	J	Yes	S2BVE
Beryllium	5.0	ug/L	1	J	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	J	U	Yes	S2BVE
Calcium	27400	ug/L	1			Yes	S2BVE
Chromium	96.1	ug/L	1			Yes	S2BVE
Cobalt	50.0	ug/L	1	J	U	Yes	S2BVE
Copper	84.6	ug/L	1			Yes	S2BVE
Iron	81100	ug/L	1	E	J	Yes	S2BVE
Lead	126	ug/L	1			Yes	S2BVE
Magnesium	17000	ug/L	1			Yes	S2BVE
Manganese	661	ug/L	1			Yes	S2BVE
Nickel	83.9	ug/L	1			Yes	S2BVE
Potassium	19500	ug/L	1	E	J	Yes	S2BVE
Selenium	3.9	ug/L	1	J	J <i>Q</i>	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	104000	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	604	ug/L	1			Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWP6	Lab Code: BONNER
Sample Number: MJRWS8	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214557	pH: 1	Sample Date: 05212012	Sample Time: 14:00:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	UN	U	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	U	U	Yes	S2BVE
Barium	200	ug/L	1	UN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	J	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	5000	ug/L	1	U	U	Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	100	ug/L	1	JE	U	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	5000	ug/L	1	U	U	Yes	S2BVE
Manganese	15.0	ug/L	1	J	U	Yes	S2BVE
Nickel	40.0	ug/L	1	U	U	Yes	S2BVE
Potassium	5000	ug/L	1	UE	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	5000	ug/L	1	U	U	Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWP6	Lab Code:	BONNER
Sample Number:	MJRWS9	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214558	pH:	1	Sample Date:	05242012	Sample Time:	10:35:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	UN	U	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	U	U	Yes	S2BVE
Barium	200	ug/L	1	UN	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	J	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	5000	ug/L	1	U	U	Yes	S2BVE
Chromium	10.0	ug/L	1	J	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	100	ug/L	1	JE	U	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	5000	ug/L	1	U	U	Yes	S2BVE
Manganese	15.0	ug/L	1	J	U	Yes	S2BVE
Nickel	40.0	ug/L	1	U	U	Yes	S2BVE
Potassium	5000	ug/L	1	UE	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	5000	ug/L	1	U	U	Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWP6	Lab Code:	BONNER
Sample Number:	MJRWT1	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214554	pH:	1	Sample Date:	05222012	Sample Time:	11:45:00
% Moisture :		% Solids :					

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	31700	ug/L	1	N	J	Yes	S2BVE
Antimony	60.0	ug/L	1	J	U	Yes	S2BVE
Arsenic	24.0	ug/L	1			Yes	S2BVE
Barium	348	ug/L	1	N	J	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	11.3	ug/L	1			Yes	S2BVE
Calcium	55700	ug/L	1			Yes	S2BVE
Chromium	48.5	ug/L	1			Yes	S2BVE
Cobalt	50.0	ug/L	1	J	U	Yes	S2BVE
Copper	327	ug/L	1			Yes	S2BVE
Iron	30200	ug/L	1	E	J	Yes	S2BVE
Lead	812	ug/L	1			Yes	S2BVE
Magnesium	22100	ug/L	1			Yes	S2BVE
Manganese	2010	ug/L	1			Yes	S2BVE
Nickel	76.9	ug/L	1			Yes	S2BVE
Potassium	7110	ug/L	1	E	J	Yes	S2BVE
Selenium	2.2	ug/L	1	J	J <i>QA</i>	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	12900	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	89.8	ug/L	1			Yes	S2BVE
Zinc	1290	ug/L	1			Yes	S2BVE

Edit History Report

Case No: 42569

Contract: EPW09037

SDG No: MJRWP6

Lab Code: BONNER

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJRWP6	Water	Barium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:05 PM	
MJRWP6	Water	Potassium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:05 PM	
MJRWP7	Water	Barium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:05 PM	
MJRWP8	Water	Barium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:06 PM	
MJRWP8	Water	Potassium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:06 PM	
MJRWP9	Water	Barium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:06 PM	
MJRWP9	Water	Potassium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:06 PM	
MJRWQ0	Water	Barium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:06 PM	
MJRWQ0	Water	Potassium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:06 PM	
MJRWQ1	Water	Barium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:07 PM	
MJRWS8	Water	Iron	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:11 PM	
MJRWS8	Water	Potassium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:11 PM	
MJRWS9	Water	Iron	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:11 PM	
MJRWS9	Water	Potassium	Validation Flag	UJ	U	Donald Matheny	6/21/12 3:11 PM	



ecology and environment, inc.

Global Environmental Specialists

720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 27, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 4 water samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for total metals (EPA CLP SOW ISM01.3) were performed by Bonner Analytical, Hattiesburg, Mississippi.

The samples were numbered:

MJRWQ5 MJRWQ9 MJRWR3 MJRWT6

No discrepancies were noted. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

June 21, 2012

Reply To
Attn. Of: OEA-095

MEMORANDUM

SUBJECT: Data Review of Metals Analysis for the Jefferson Avenue Site Targeted Brownfields Assessment - Case 42569, SDG: MJRWQ5

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

TO: Joanne LaBaw, Project Manager

CC: Renee Nordeen, Ecology & Environment, Inc.,

The quality assurance (QA) review of the analytical data generated from the analysis of four (4) water samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by the Bonner Analytical, located in Hattiesburg, MS. All sample analyses were evaluated following EPA's Stage 2 Data Validation Electronic Process (S2BVE). Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of quality control results for this sample set is as follows:

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	Y*	Non-detect or <10% of Sample
Matrix Spike (MJRWQ5)	91 - 105%	N	75 - 125%
Sample Duplicate (MJRWQ5)	≤ 8%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	92 - 109%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJRWQ5)	≤ 9%	N	≤ 10% Difference

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified (U) and the values raised to the CRQLs due to preparation and/or instrument blank contamination.

All sample data with values reported below the CRQL were qualified (J).

Sample Summary Report

Case No: 42569	Contract: EPW09037	SDG No: MJRWQ5	Lab Code: BONNER
Sample Number: MJRWQ5	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214534	pH: 1	Sample Date: 05242012	Sample Time: 18:14:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	J	U	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	42900	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	100	ug/L	1	J	U	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	28900	ug/L	1			Yes	S2BVE
Manganese	168	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	U	U	Yes	S2BVE
Potassium	7700	ug/L	1			Yes	S2BVE
Selenium	35.0	ug/L	1	J	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	33000	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWQ5	Lab Code:	BONNER
Sample Number:	MJRWQ9	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214538	pH:	1	Sample Date:	05242012	Sample Time:	18:58:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	231	ug/L	1			Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	35600	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	237	ug/L	1			Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	24400	ug/L	1			Yes	S2BVE
Manganese	204	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	7450	ug/L	1			Yes	S2BVE
Selenium	35.0	ug/L	1	J	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	38800	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No: 42569	Contract: EPW09037	SDG No: MJRWQ5	Lab Code: BONNER
Sample Number: MJRWR3	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: 12214542	pH: 1	Sample Date: 05252012	Sample Time: 13:50:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	249	ug/L	1			Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	48.3	ug/L	1			Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	47600	ug/L	1			Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	270	ug/L	1			Yes	S2BVE
Lead	2.0	ug/L	1	J	J <i>Qmu</i>	Yes	S2BVE
Magnesium	28400	ug/L	1			Yes	S2BVE
Manganese	360	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	6830	ug/L	1			Yes	S2BVE
Selenium	35.0	ug/L	1	J	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	19800	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42569	Contract:	EPW09037	SDG No:	MJRWQ5	Lab Code:	BONNER
Sample Number:	MJRW6	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	12214565	pH:	1	Sample Date:	05252012	Sample Time:	10:15:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	1890	ug/L	1			Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	133000	ug/L	1			Yes	S2BVE
Chromium	38.6	ug/L	1			Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	1320	ug/L	1			Yes	S2BVE
Lead	2.6	ug/L	1	J	J <i>Q</i>	Yes	S2BVE
Magnesium	5000	ug/L	1	J	U	Yes	S2BVE
Manganese	38.1	ug/L	1			Yes	S2BVE
Nickel	40.0	ug/L	1	J	U	Yes	S2BVE
Potassium	5920	ug/L	1			Yes	S2BVE
Selenium	35.0	ug/L	1	J	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	20700	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	J	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Edit History Report

Case No: 42569

Contract: EPW09037

SDG No: MJRWQ5

Lab Code: BONNER



ecology and environment, inc.

Global Environmental Specialists

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

MEMORANDUM

DATE: August 6, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 2 water samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for total metals (EPA CLP SOW ISM01.3) were performed by Bonner Analytical, Hattiesburg, Mississippi.

The samples were numbered: MJRWT7 MJRWT8

No discrepancies were noted. The secondary reviewer added the bias qualifier "Q" to estimated quantities to indicate that the result was less than the Contract Required Quantitation Limit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

August 6, 2012

Reply To
Attn. Of: OEA-095

MEMORANDUM

SUBJECT: Data Review of Metals Analysis for the Jefferson Avenue Site Targeted Brownfields Assessment - Case 42684, SDG: MJRWT7

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

TO: Joanne LaBaw, Project Manager

CC: Renee Nordeen, Ecology & Environment, Inc.,

The quality assurance (QA) review of the analytical data generated from the analysis of two (2) water samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by the Bonner Analytical, located in Hattiesburg, MS. Lab analyses were evaluated following EPA's Stage 2 Data Validation Electronic Process (S2BVE). Some data qualifiers may have been adjusted using the reviewer's professional judgment and project specific criteria. A summary of quality control results for this sample set is as follows:

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	Y*	Non-detect or <10% of Sample
Matrix Spike (MJRWT7)	79 - 106%	N	75 - 125%
Sample Duplicate (MJRWT7)	≤ 7%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	90 - 104%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJRWT7)	≤ 7%	N	≤ 10% Difference

Quality Control Outliers are further explained below:

Blanks: A limited number of data were qualified (U) and the values raised to the CRQLs due to preparation and/or instrument blank contamination.

All sample data with values reported below the CRQL were qualified (J).

Sample Summary Report

Case No: 42684	Contract: EPW09037	SDG No: MJRWT7	Lab Code: BONNER
Sample Number: LCS01	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	367	ug/L	1			Yes	S2BVE
Antimony	115	ug/L	1			Yes	S2BVE
Arsenic	18.6	ug/L	1			Yes	S2BVE
Barium	385	ug/L	1			Yes	S2BVE
Beryllium	9.6	ug/L	1			Yes	S2BVE
Cadmium	10.4	ug/L	1			Yes	S2BVE
Chromium	19.3	ug/L	1			Yes	S2BVE
Cobalt	99.2	ug/L	1			Yes	S2BVE
Copper	46.8	ug/L	1			Yes	S2BVE
Iron	205	ug/L	1			Yes	S2BVE
Lead	19.5	ug/L	1			Yes	S2BVE
Manganese	29.1	ug/L	1			Yes	S2BVE
Nickel	78.1	ug/L	1			Yes	S2BVE
Selenium	71.2	ug/L	1			Yes	S2BVE
Silver	19.8	ug/L	1			Yes	S2BVE
Thallium	49.8	ug/L	1			Yes	S2BVE
Vanadium	93.4	ug/L	1			Yes	S2BVE
Zinc	121	ug/L	1			Yes	S2BVE
Calcium	10100	ug/L	1			Yes	S2BVE
Magnesium	9680	ug/L	1			Yes	S2BVE
Potassium	9040	ug/L	1			Yes	S2BVE
Sodium	9220	ug/L	1			Yes	S2BVE

Case No: 42684	Contract: EPW09037	SDG No: MJRWT7	Lab Code: BONNER
Sample Number: MJRWT7	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: MW10GW	pH: 2	Sample Date: 07022012	Sample Time: 12:40:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6650	ug/L	1			Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	37200	ug/L	1			Yes	S2BVE
Chromium	37.6	ug/L	1			Yes	S2BVE
Cobalt	50.0	ug/L	1	J	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	7900	ug/L	1			Yes	S2BVE
Lead	4.8	ug/L	1	J	J Q	Yes	S2BVE
Magnesium	24000	ug/L	1			Yes	S2BVE
Manganese	596	ug/L	1			Yes	S2BVE
Nickel	48.3	ug/L	1			Yes	S2BVE
Potassium	5000	ug/L	1	J	U	Yes	S2BVE
Selenium	0.87	ug/L	1	J	J Q	Yes	S2BVE
Silver	2.6	ug/L	1	J	J Q	Yes	S2BVE
Sodium	16000	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	15.0	ug/L	1	J	J Q	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No:	42684	Contract:	EPW09037	SDG No:	MJRW7	Lab Code:	BONNER
Sample Number:	MJRW7D	Method:	ICP_AES	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	MW10GW	pH:	2	Sample Date:	07022012	Sample Time:	12:40:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	6180	ug/L	1			Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	J	U	Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	35400	ug/L	1			Yes	S2BVE
Chromium	33.5	ug/L	1			Yes	S2BVE
Cobalt	50.0	ug/L	1	J	U	Yes	S2BVE
Copper	25.0	ug/L	1	J	U	Yes	S2BVE
Iron	7460	ug/L	1			Yes	S2BVE
Lead	4.5	ug/L	1	J	J	Yes	S2BVE
Magnesium	22600	ug/L	1			Yes	S2BVE
Manganese	563	ug/L	1			Yes	S2BVE
Nickel	45.2	ug/L	1			Yes	S2BVE
Potassium	5000	ug/L	1	J	U	Yes	S2BVE
Selenium	0.85	ug/L	1	J	J	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	15200	ug/L	1			Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	13.8	ug/L	1	J	J	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No: 42684	Contract: EPW09037	SDG No: MJRW7	Lab Code: BONNER
Sample Number: MJRW7S	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: MW10GW	pH: 2	Sample Date: 07022012	Sample Time: 12:40:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	8280	ug/L	1			Yes	S2BVE
Antimony	79.4	ug/L	1			Yes	S2BVE
Arsenic	40.5	ug/L	1			Yes	S2BVE
Barium	2040	ug/L	1			Yes	S2BVE
Beryllium	49.8	ug/L	1			Yes	S2BVE
Cadmium	53.1	ug/L	1			Yes	S2BVE
Chromium	232	ug/L	1			Yes	S2BVE
Calcium	36300	ug/L	1			Yes	S2BVE
Cobalt	525	ug/L	1			Yes	S2BVE
Copper	250	ug/L	1			Yes	S2BVE
Iron	8620	ug/L	1			Yes	S2BVE
Lead	23.9	ug/L	1			Yes	S2BVE
Manganese	1070	ug/L	1			Yes	S2BVE
Magnesium	23100	ug/L	1			Yes	S2BVE
Nickel	542	ug/L	1			Yes	S2BVE
Selenium	53.3	ug/L	1			Yes	S2BVE
Silver	50.5	ug/L	1			Yes	S2BVE
Thallium	52.7	ug/L	1			Yes	S2BVE
Potassium	5000	ug/L	1	J	U	Yes	S2BVE
Vanadium	498	ug/L	1			Yes	S2BVE
Zinc	537	ug/L	1			Yes	S2BVE
Sodium	15600	ug/L	1			Yes	S2BVE

Case No: 42684	Contract: EPW09037	SDG No: MJRWT7	Lab Code: BONNER
Sample Number: MJRWT8	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location: RS03WT	pH: 2	Sample Date: 07022012	Sample Time: 14:30:00
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	J	U	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	U	U	Yes	S2BVE
Barium	200	ug/L	1	U	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	U	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	5000	ug/L	1	U	U	Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	J	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	100	ug/L	1	J	U	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	5000	ug/L	1	J	U	Yes	S2BVE
Manganese	15.0	ug/L	1	J	U	Yes	S2BVE
Nickel	1.5	ug/L	1	J	J Q	Yes	S2BVE
Potassium	5000	ug/L	1	U	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	35.3	ug/L	1	J	J Q	Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Case No: 42684	Contract: EPW09037	SDG No: MJRWT7	Lab Code: BONNER
Sample Number: PBW01	Method: ICP_AES	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :	% Solids :		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	J	U	Yes	S2BVE
Antimony	60.0	ug/L	1	U	U	Yes	S2BVE
Arsenic	10.0	ug/L	1	U	U	Yes	S2BVE
Barium	200	ug/L	1	J	U	Yes	S2BVE
Beryllium	5.0	ug/L	1	J	U	Yes	S2BVE
Cadmium	5.0	ug/L	1	U	U	Yes	S2BVE
Calcium	5000	ug/L	1	U	U	Yes	S2BVE
Chromium	10.0	ug/L	1	U	U	Yes	S2BVE
Cobalt	50.0	ug/L	1	U	U	Yes	S2BVE
Copper	25.0	ug/L	1	U	U	Yes	S2BVE
Iron	100	ug/L	1	U	U	Yes	S2BVE
Lead	10.0	ug/L	1	U	U	Yes	S2BVE
Magnesium	5000	ug/L	1	J	U	Yes	S2BVE
Manganese	15.0	ug/L	1	J	U	Yes	S2BVE
Nickel	40.0	ug/L	1	U	U	Yes	S2BVE
Potassium	5000	ug/L	1	U	U	Yes	S2BVE
Selenium	35.0	ug/L	1	U	U	Yes	S2BVE
Silver	10.0	ug/L	1	U	U	Yes	S2BVE
Sodium	5000	ug/L	1	U	U	Yes	S2BVE
Thallium	25.0	ug/L	1	U	U	Yes	S2BVE
Vanadium	50.0	ug/L	1	U	U	Yes	S2BVE
Zinc	60.0	ug/L	1	J	U	Yes	S2BVE

Edit History Report

Case No: 42684

Contract: EPW09037

SDG No: MJRWT7

Lab Code: BONNER

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJRWT7	Water	Aluminum	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Antimony	Validation Flag	R	U	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Beryllium	Validation Flag	R	U	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Cadmium	Validation Flag	R	U	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Calcium	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Chromium	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Iron	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Lead	Validation Flag	J-	J	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Magnesium	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Manganese	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Nickel	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Selenium	Validation Flag	J-	J	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Silver	Validation Flag	J-	J	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Sodium	Validation Flag	J-		Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Thallium	Validation Flag	R	U	Don Matheny	8/6/12 1:35 PM	
MJRWT7	Water	Vanadium	Validation Flag	J-	J	Don Matheny	8/6/12 1:35 PM	
MJRWT7D	Water	Aluminum	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Antimony	Validation Flag	R	U	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Beryllium	Validation Flag	R	U	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Cadmium	Validation Flag	R	U	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Calcium	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Chromium	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Iron	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Lead	Validation Flag	J-	J	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Magnesium	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Manganese	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Nickel	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Selenium	Validation Flag	J-	J	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Silver	Validation Flag	R	U	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Sodium	Validation Flag	J-		Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Thallium	Validation Flag	R	U	Don Matheny	8/6/12 1:36 PM	
MJRWT7D	Water	Vanadium	Validation Flag	J-	J	Don Matheny	8/6/12 1:36 PM	
MJRWT7S	Water	Aluminum	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Antimony	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Arsenic	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Barium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJRWT7S	Water	Beryllium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Cadmium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Calcium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Chromium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Cobalt	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Copper	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Iron	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Lead	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Magnesium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Manganese	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Nickel	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Selenium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Silver	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Sodium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Thallium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Vanadium	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT7S	Water	Zinc	Validation Flag	J-		Don Matheny	8/6/12 1:37 PM	
MJRWT8	Water	Antimony	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Arsenic	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Barium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Beryllium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Cadmium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Calcium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Chromium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Copper	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Lead	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Nickel	Validation Flag	J-	J	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Potassium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Selenium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Silver	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Sodium	Validation Flag	J-	J	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Thallium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	
MJRWT8	Water	Vanadium	Validation Flag	R	U	Don Matheny	8/6/12 1:38 PM	



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MEMORANDUM

DATE: July 10, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 12 soil and 20 water samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Total Petroleum Hydrocarbons-Gasoline Range Extended (Ecology Method NWTPH-Gx) were performed at the EPA Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

12214531 12214532 12214533 12214535 12214536 12214537
12214539 12214540 12214541 12214550 12214551 12214552
12214525 12214526 12214527 12214528 12214529 12214530
12214534 12214538 12214542 12214554 12214555 12214556
12214558 12214559 12214560 12214561 12214562 12214563
12214564 12214565

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-Gasoline Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: Jefferson Ave TBA

Project Code: SFP-026A

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

To: Joanne LaBaw
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 NWTPH-Gx analysis results for the Jefferson Ave TBA project for the samples collected 05/22/12 to 05/25/12. 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: June 26, 2012

To: Joanne LaBaw
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 Jefferson Ave TBA Project

Project Code: SFP-026A
Account Code: 20122013B10P301D43G000BZ00

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 soil samples:

Soil

12214531	12214532	12214533	12214535	12214536	12214537
12214539	12214540	12214541	12214550	12214551	12214552

Water

12214525	12214526	12214527	12214528	12214529	12214530
12214534	12214538	12214542	12214554	12214555	12214556
12214558	12214559	12214560	12214561	12214562	12214563
12214564	12214565				

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 National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC 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 the 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 5/24/12, 5/30/12 and 6/1/12 for gasoline range organics (unleaded gasoline composite) and the surrogate, 1,4-difluorobenzene. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq 15\%$ 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 the percent accuracies were 80-120% of the true values 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. TPH-Gx 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 criteria of 70-130% 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 analyses were performed using samples 12214531, 12214534 and 12214540. All results which were above 5 times the reporting limit met the relative percent difference (RPD) criteria of $\leq 30\%$.

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 petroleum products, e.g. gasolines, naphtha, mineral spirits, Stoddard solvent, and other volatile petroleum products that generally elute before diesel from the gas chromatograph.

Sample 12214552 contained gasoline range organics with a chromatographic pattern that matched the unleaded gasoline composite standard.

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 - 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-026A

Site : JEFFERSON AVE TBA

Contact : Joanne Labaw

Account : 20122013B10P301D43G000BZ00

Sample : 12214525

Description : MW01GW

Matrix : Water

Weight Basis : N/A

Collected : 5/22/2012 1:50:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	86 %Rec		5/24/12	1

Sample : 12214526

Description : MW02GW

Matrix : Water

Weight Basis : N/A

Collected : 5/22/2012 12:30:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	85 %Rec		5/24/12	1

Sample : 12214527

Description : MW03GW

Matrix : Water

Collected : 5/22/2012 1:00:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	84 %Rec		5/24/12	1

Sample : 12214528

Description : MW04GW

Matrix : Water

Collected : 5/22/2012 10:20:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	83 %Rec		5/24/12	1

Sample : 12214529

Description : MW05GW

Matrix : Water

Collected : 5/22/2012 10:50:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	80 %Rec		5/24/12	1

Sample : 12214530

Description : MW06GW

Matrix : Water

Collected : 5/22/2012 11:20:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	80 %Rec		5/24/12	1

Sample : 12214531

Description : MW07SB04

Matrix : Soil

Collected : 5/23/2012 10:15:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.7 mg/Kg	U	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	102 %Rec		6/1/12	1

Sample : 12214532

Description : MW07SB08

Matrix : Soil

Collected : 5/23/2012 10:25:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.9 mg/Kg	U	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	104 %Rec		6/1/12	1

Sample : 12214533

Description : MW07SB12

Matrix : Soil

Weight Basis : N/A

Collected : 5/23/2012 10:30:00AM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.2 mg/Kg	U	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	106 %Rec		6/1/12	1

Sample : 12214534

Description : MW07GW

Matrix : Water

Weight Basis : N/A

Collected : 5/24/2012 6:14:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	67 %Rec		5/31/12	1

Sample : 12214535

Description : MW08SB04

Matrix : Soil

Weight Basis : N/A

Collected : 5/23/2012 2:14:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	6.5 mg/Kg	U	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	107 %Rec		6/1/12	1

Sample : 12214536

Description : MW08SB08

Matrix : Soil

Weight Basis : N/A

Collected : 5/23/2012 2:26:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	5.1 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	103 %Rec		6/2/12	1

Sample : 12214537

Description : MW08SB12

Matrix : Soil

Weight Basis : N/A

Collected : 5/23/2012 2:45:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.5 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	107 %Rec		6/2/12	1

Sample : 12214538

Description : MW08GW

Matrix : Water

Weight Basis : N/A

Collected : 5/24/2012 6:58:58PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	66 %Rec		5/31/12	1

Sample : 12214539

Description : MW09SB04

Matrix : Soil

Collected : 5/24/2012 9:28:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.2 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	104 %Rec		6/2/12	1

Sample : 12214540

Description : MW09SB08

Matrix : Soil

Collected : 5/24/2012 9:42:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	5.1 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	105 %Rec		6/2/12	1

Sample : 12214541

Description : MW09SB12

Matrix : Soil

Collected : 5/24/2012 10:05:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.4 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	107 %Rec		6/2/12	1

Sample : 12214542

Description : MW09GW

Matrix : Water

Weight Basis : N/A

Collected : 5/25/2012 1:50:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	64 %Rec		5/31/12	1

Sample : 12214550

Description : TE06SB

Matrix : Soil

Weight Basis : N/A

Collected : 5/22/2012 11:15:00AM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.8 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	107 %Rec		6/2/12	1

Sample : 12214551

Description : TE09SB04

Matrix : Soil

Weight Basis : N/A

Collected : 5/22/2012 2:45:00PM

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	111 %Rec		6/2/12	1

Sample : 12214556

Description : ID02WT

Matrix : Water

Collected : 5/24/2012 4:40:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	64	%Rec		5/31/12	1

Sample : 12214558

Description : RS02WT

Matrix : Water

Collected : 5/24/2012 10:35:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	63	%Rec		5/31/12	1

Sample : 12214559

Description : TB01WT

Matrix : Water

Collected : 5/21/2012 7:35:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	79	%Rec		5/24/12	1

Sample : 12214560

Description : TB02WT

Matrix : Water

Collected : 5/22/2012 5:05:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	70 %Rec		5/31/12	1

Sample : 12214561

Description : TB03WT

Matrix : Water

Collected : 5/24/2012 5:25:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	62 %Rec		5/31/12	1

Sample : 12214562

Description : ID03WT

Matrix : Water

Collected : 5/24/2012 4:50:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	51 %Rec		6/1/12	1

Sample : 12214563

Description : ID04WT

Matrix : Water

Collected : 5/24/2012 5:00:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/1/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	65	%Rec		6/1/12	1

Sample : 12214564

Description : ID05WT

Matrix : Water

Collected : 5/25/2012 12:18:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/1/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	62	%Rec		6/1/12	1

Sample : 12214565

Description : ID06WT

Matrix : Water

Collected : 5/25/2012 10:15:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/1/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	58	%Rec		6/1/12	1

Sample : 12214531 Sample Duplicate

Description : MW07SB04

Matrix : Soil

Collected : 5/23/2012 10:15:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	3.9 mg/Kg	U	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	102 %Rec		6/1/12	1

Sample : 12214534 Sample Duplicate

Description : MW07GW

Matrix : Water

Collected : 5/24/2012 6:14:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	67 %Rec		5/31/12	1

Sample : 12214540 Sample Duplicate

Description : MW09SB08

Matrix : Soil

Collected : 5/24/2012 9:42:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
*90209	TPH-Gx Gasoline Range Organics	4.4 mg/Kg	U	6/2/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	104 %Rec		6/2/12	1

Sample : JS060112B2 Blank

Description : Blank

Matrix : Solid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	100 %Rec		6/1/12	1

Sample : JW042312B3 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	89 %Rec		5/24/12	1

Sample : JW053112B1 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	5/31/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	73 %Rec		5/31/12	1

Sample : JW060112B1 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	67 %Rec		6/1/12	1

Sample : JS060112C6 Lab Control Std

Description : Lab Control Standard

Matrix : Solid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
*90209	TPH-Gx Gasoline Range Organics	108 %Rec		6/1/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	109 %Rec		6/1/12	1

Sample : JW052412C6 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
*90209	TPH-Gx Gasoline Range Organics	91 %Rec		5/24/12	1
Surrogate Compounds:					
540363	Benzene, 1,4-difluoro-	92 %Rec		5/24/12	1

Sample : JW053112C1 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	85	%Rec		5/31/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	84	%Rec		5/31/12	1

Sample : JW060112C1 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	93	%Rec		6/1/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	79	%Rec		6/1/12	1

Sample : JS060112C7 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Solid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	117	%Rec		6/2/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	115	%Rec		6/2/12	1

Sample : JW052412C7 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	82	%Rec		5/25/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	81	%Rec		5/25/12	1

Sample : JW053112C3 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	81	%Rec		5/31/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	67	%Rec		5/31/12	1

Sample : JW060112C2 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	92	%Rec		6/1/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	72	%Rec		6/1/12	1



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MEMORANDUM

DATE: July 10, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of 12 soil and 17 water samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for Total Petroleum Hydrocarbons-Diesel Range Extended (Ecology Method NWTPH-Dx) were performed at the EPA Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

12214531	12214532	12214533	12214535	12214536	12214537
12214539	12214540	12214541	12214550	12214551	12214552
12214525	12214526	12214527	12214528	12214529	12214530
12214534	12214538	12214542	12214554	12214555	12214556
12214558	12214562	12214563	12214564	12214565	

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-Diesel Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: Jefferson Ave TBA

Project Code: SFP-026A

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

To: Joanne LaBaw
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 NWTPH-Dx analysis results for the Jefferson Ave TBA project for the samples collected 05/22/12 to 05/25/12. 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: June 27, 2012

To: Joanne LaBaw
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-Diesel Range Extended
Analysis of Samples from the Jefferson Ave TBA Project

Project Code: SFP-026A
Account Code: 20122013B10P301D43G000BZ00

CC: Renee Nordeen, E&E

The following is a quality assurance review of the data for Diesel range organics (TPH-Dx), which includes motor oil, 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-Dx.

This review was conducted for the following soil samples:

Soil

12214531	12214532	12214533	12214535	12214536	12214537
12214539	12214540	12214541	12214550	12214551	12214552

Water

12214525	12214526	12214527	12214528	12214529	12214530
12214534	12214538	12214542	12214554	12214555	12214556
12214558	12214562	12214563	12214564	12214565	

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 National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

1. Sample Transport and Receipt

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

2. 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 water samples is 7 days from the time of collection and 14 days for soil/sediment samples. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

3. Sample Preparation

Samples were prepared according to the method/SOP.

4. Initial Calibration

Initial calibration was performed on 5/29/12 for #2 diesel, motor oil and the surrogate, pentacosane. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq 15\%$ or the correlation coefficients met the criteria of ≥ 0.99 .

5. 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.

6. 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.

7. 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%.

8. 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 criteria of 70-130% with a relative percent difference (RPD) of ≤ 30 .

9. Duplicate Sample Analysis

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 12214531, 12214534 and 12214540. All results that were above 5 times the reporting limit met the relative percent difference (RPD) criteria of $\leq 30\%$ except for the following.

Sample 12214531 and duplicate resulted with >30 RPD for motor oil range organics. The motor oil range organic results for sample 12214531 and duplicate were qualified as estimated, "J".

10. 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.

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.

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.

11. 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-026A

Site : JEFFERSON AVE TBA

Contact : Joanne Labaw

Account : 20122013B10P301D43G000BZ00

Sample : 12214525

Description : MW01GW

Matrix : Water

Weight Basis : N/A

Collected : 5/22/2012 1:50:00PM

Parameter : TPH-Dx

Fraction : N/A

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	0.22	mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.56	mg/L	U	5/30/12	1
Surrogate Compounds:						
629992	Pentacosane	86	%Rec		5/30/12	1

Sample : 12214526

Description : MW02GW

Matrix : Water

Weight Basis : N/A

Collected : 5/22/2012 12:30:00PM

Parameter : TPH-Dx

Fraction : N/A

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	0.22	mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.54	mg/L	U	5/30/12	1
Surrogate Compounds:						
629992	Pentacosane	82	%Rec		5/30/12	1

Sample : 12214527

Description : MW03GW

Matrix : Water

Collected : 5/22/2012 1:00:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.24 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.59 mg/L	U	5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	86 %Rec		5/30/12	1

Sample : 12214528

Description : MW04GW

Matrix : Water

Collected : 5/22/2012 10:20:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.23 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.57 mg/L	U	5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	85 %Rec		5/30/12	1

Sample : 12214529

Description : MW05GW

Matrix : Water

Collected : 5/22/2012 10:50:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.21 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.53 mg/L	U	5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	80 %Rec		5/30/12	1

Sample : 12214530

Description : MW06GW

Matrix : Water

Collected : 5/22/2012 11:20:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3510C - Separatory Funnel Liquid-liquid 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	0.22 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.56 mg/L	U	5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	92 %Rec		5/30/12	1

Sample : 12214531

Description : MW07SB04

Matrix : Soil

Collected : 5/23/2012 10:15:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.2 mg/Kg	U	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	420 mg/Kg	J	6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	97 %Rec		6/7/12	1

Sample : 12214532

Description : MW07SB08

Matrix : Soil

Collected : 5/23/2012 10:25:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.4 mg/Kg	U	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	130 mg/Kg		6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	98 %Rec		6/7/12	1

Sample : 12214533

Description : MW07SB12

Matrix : Soil

Collected : 5/23/2012 10:30:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	32 mg/Kg		6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	97 %Rec		6/7/12	1

Sample : 12214534

Description : MW07GW

Matrix : Water

Collected : 5/24/2012 6:14:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.23 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.57 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	56 %Rec		6/12/12	1

Sample : 12214535

Description : MW08SB04

Matrix : Soil

Collected : 5/23/2012 2:14:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.4 mg/Kg	U	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	370 mg/Kg		6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	102 %Rec		6/7/12	1

Sample : 12214536

Description : MW08SB08

Matrix : Soil

Weight Basis : N/A

Collected : 5/23/2012 2:26:00PM

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.3 mg/Kg	U	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	130 mg/Kg		6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	100 %Rec		6/7/12	1

Sample : 12214537

Description : MW08SB12

Matrix : Soil

Weight Basis : N/A

Collected : 5/23/2012 2:45:00PM

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.6 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	83 mg/Kg		6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	101 %Rec		6/8/12	1

Sample : 12214538

Description : MW08GW

Matrix : Water

Weight Basis : N/A

Collected : 5/24/2012 6:58:58PM

Parameter : TPH-Dx

Fraction : N/A

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	0.23 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.57 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	65 %Rec		6/12/12	1

Sample : 12214539

Description : MW09SB04

Matrix : Soil

Collected : 5/24/2012 9:28:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.5 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	25 mg/Kg		6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	100 %Rec		6/8/12	1

Sample : 12214540

Description : MW09SB08

Matrix : Soil

Collected : 5/24/2012 9:42:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.6 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	21 mg/Kg	U	6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	103 %Rec		6/8/12	1

Sample : 12214541

Description : MW09SB12

Matrix : Soil

Collected : 5/24/2012 10:05:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.4 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	21 mg/Kg	U	6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	97 %Rec		6/8/12	1

Sample : 12214542

Description : MW09GW

Matrix : Water

Collected : 5/25/2012 1:50:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.22 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.56 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	83 %Rec		6/12/12	1

Sample : 12214550

Description : TE06SB

Matrix : Soil

Collected : 5/22/2012 11:15:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.5 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	160 mg/Kg		6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	103 %Rec		6/8/12	1

Sample : 12214551

Description : TE09SB04

Matrix : Soil

Collected : 5/22/2012 2:45:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.5 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	41 mg/Kg		6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	100 %Rec		6/8/12	1

Sample : 12214552

Description : TE09SB07

Matrix : Soil

Weight Basis : N/A

Collected : 5/22/2012 3:00:00PM

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.6 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	62 mg/Kg		6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	100 %Rec		6/8/12	1

Sample : 12214554

Description : TE06GW

Matrix : Water

Weight Basis : N/A

Collected : 5/22/2012 11:45:00AM

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3510C - Separatory Funnel Liquid-liquid 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	0.21 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.62 mg/L		5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	93 %Rec		5/30/12	1

Sample : 12214555

Description : ID01WT

Matrix : Water

Weight Basis : N/A

Collected : 5/22/2012 2:10:00PM

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3510C - Separatory Funnel Liquid-liquid 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	0.20 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.68 mg/L		5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	72 %Rec		5/30/12	1

Sample : 12214556

Description : ID02WT

Matrix : Water

Collected : 5/24/2012 4:40:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.22 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.56 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	96 %Rec		6/12/12	1

Sample : 12214558

Description : RS02WT

Matrix : Water

Collected : 5/24/2012 10:35:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.24 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.60 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	65 %Rec		6/12/12	1

Sample : 12214562

Description : ID03WT

Matrix : Water

Collected : 5/24/2012 4:50:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.24 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.59 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	95 %Rec		6/12/12	1

Sample : 12214563

Description : ID04WT

Matrix : Water

Collected : 5/24/2012 5:00:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.22	mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.54	mg/L	U	6/12/12	1
Surrogate Compounds:						
629992	Pentacosane	76	%Rec		6/12/12	1

Sample : 12214564

Description : ID05WT

Matrix : Water

Collected : 5/25/2012 12:18:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.21	mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.53	mg/L	U	6/12/12	1
Surrogate Compounds:						
629992	Pentacosane	86	%Rec		6/12/12	1

Sample : 12214565

Description : ID06WT

Matrix : Water

Collected : 5/25/2012 10:15:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.21	mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.52	mg/L	U	6/12/12	1
Surrogate Compounds:						
629992	Pentacosane	85	%Rec		6/12/12	1

Sample : 12214531 Sample Duplicate

Description : MW07SB04

Matrix : Soil

Collected : 5/23/2012 10:15:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.3 mg/Kg	U	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	660 mg/Kg	J	6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	105 %Rec		6/7/12	1

Sample : 12214534 Sample Duplicate

Description : MW07GW

Matrix : Water

Collected : 5/24/2012 6:14:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.24 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.59 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	82 %Rec		6/12/12	1

Sample : 12214540 Sample Duplicate

Description : MW09SB08

Matrix : Soil

Collected : 5/24/2012 9:42:00AM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	8.2 mg/Kg	U	6/8/12	1
*400010	TPH-GC/Motor Oil Range Organics	21 mg/Kg	U	6/8/12	1
Surrogate Compounds:					
629992	Pentacosane	95 %Rec		6/8/12	1

Sample : 74S053112B1 Blank

Description : Blank

Matrix : Solid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	6/7/12	1
*400010	TPH-GC/Motor Oil Range Organics	20 mg/Kg	U	6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	98 %Rec		6/7/12	1

Sample : 74W052412B1 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.20 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.50 mg/L	U	5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	91 %Rec		5/30/12	1

Sample : 74W052412B2 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3510C - Separatory Funnel Liquid-liquid 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	0.20 mg/L	U	5/30/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.50 mg/L	U	5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	88 %Rec		5/30/12	1

Sample : 74W053012B1 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.20 mg/L	U	6/12/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.50 mg/L	U	6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	95 %Rec		6/12/12	1

Sample : 74S053112L1 Lab Control Std

Description : Lab Control Standard

Matrix : Solid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	95 %Rec		6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	95 %Rec		6/7/12	1

Sample : 74W052412L1 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	92 %Rec		5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	104 %Rec		5/30/12	1

Sample : 74W052412L3 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3510C - Separatory Funnel Liquid-liquid 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	88 %Rec		5/30/12	1
Surrogate Compounds:					
629992	Pentacosane	84 %Rec		5/30/12	1

Sample : 74W053012L1 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	90 %Rec		6/12/12	1
Surrogate Compounds:					
629992	Pentacosane	94 %Rec		6/12/12	1

Sample : 74S053112L2 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Solid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3550-M - (MOD) Ultrasonic 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	83 %Rec		6/7/12	1
Surrogate Compounds:					
629992	Pentacosane	81 %Rec		6/7/12	1

Sample : 74W052412L2 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	95	%Rec		5/30/12	1
Surrogate Compounds:						
629992	Pentacosane	99	%Rec		5/30/12	1

Sample : 74W052412L4 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

Prep Method: 3510C - Separatory Funnel Liquid-liquid 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	95	%Rec		5/30/12	1
Surrogate Compounds:						
629992	Pentacosane	92	%Rec		5/30/12	1

Sample : 74W053012L2 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	92	%Rec		6/12/12	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		6/12/12	1



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

MEMORANDUM

DATE: August 2, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of two soil samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for diesel range organics (Ecology Method NWTPH-Dx) was performed at the EPA Region 10 Laboratory, Port Orchard, Washington.

The samples were numbered: 12274101 12274102

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-Diesel Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: Jefferson Ave TBA

Project Code: SFP-026A

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

To: Joanne LaBaw
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 NWTPH-Dx analysis results for the Jefferson Ave TBA project for the samples collected 07/2/12. 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: July 23, 2012

To: Joanne LaBaw
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-Diesel Range Extended Analysis of Samples from the Jefferson Ave TBA Project

Project Code: SFP-026A
Account Code: 20122013B10P301D43G000BZ00

CC: Renee Nordeen, E&E

The following is a quality assurance review of the data for Diesel range organics (TPH-Dx), which includes motor oil, 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-Dx.

This review was conducted for the following soil samples:

12274101 12274102

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 National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

1. Sample Transport and Receipt

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

2. 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 water samples is 7 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.

3. Sample Preparation

Samples were prepared according to the method/SOP.

4. Initial Calibration

Initial calibration was performed on 5/29/12 for #2 diesel, motor oil and the surrogate, pentacosane. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq 15\%$ or the correlation coefficients met the criteria of ≥ 0.99 .

5. 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.

6. 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.

7. 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%.

8. 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 criteria of 70-130% with a relative percent difference (RPD) of ≤ 30 .

9. Duplicate Sample Analysis

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 sample 12274101. All results that were above 5 times the reporting limit met the relative percent difference (RPD) criteria of $\leq 30\%$.

10. 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.

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.

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.

11. 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-026A

Site : JEFFERSON AVE TBA

Contact : Joanne Labaw

Account : 20122013B10P301D43G000BZ00

Sample : 12274101

Description : MW10GW

Matrix : Water

Collected : 7/2/2012 12:40:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.23	mg/L	U	7/10/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.57	mg/L	U	7/10/12	1
Surrogate Compounds:						
629992	Pentacosane	83	%Rec		7/10/12	1

Sample : 12274102

Description : RS03WT

Matrix : Water

Collected : 7/2/2012 2:30:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.27	mg/L	U	7/10/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.67	mg/L	U	7/10/12	1
Surrogate Compounds:						
629992	Pentacosane	88	%Rec		7/10/12	1

Sample : 12274101 Sample Duplicate

Description : MW10GW

Matrix : Water

Collected : 7/2/2012 12:40:00PM

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.23	mg/L	U	7/10/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.57	mg/L	U	7/10/12	1
Surrogate Compounds:						
629992	Pentacosane	79	%Rec		7/10/12	1

Sample : 74W070612B1 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	0.20	mg/L	U	7/10/12	1
*400010	TPH-GC/Motor Oil Range Organics	0.50	mg/L	U	7/10/12	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		7/10/12	1

Sample : 74W070612L1 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	90	%Rec		7/10/12	1
Surrogate Compounds:						
629992	Pentacosane	95	%Rec		7/10/12	1

Sample : 74W070612L2 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Dx

Fraction : N/A

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	93	%Rec		7/10/12	1
Surrogate Compounds:						
629992	Pentacosane	96	%Rec		7/10/12	1



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

MEMORANDUM

DATE: August 2, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of three samples collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analyses for gasoline range organics (Ecology Method NWTPH-Gx) was performed at the EPA Region 10 Laboratory, Port Orchard, Washington.

The samples were numbered: 12274100 12274101 12274102

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-Gasoline Range Extended Analysis from the USEPA Region 10 Laboratory

Project Name: Jefferson Ave TBA

Project Code: SFP-026A

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

To: Joanne LaBaw
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 NWTPH-Gx analysis results for the Jefferson Ave TBA project for the samples collected 07/2/12. 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: July 23, 2012

To: Joanne LaBaw
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 Jefferson Ave TBA Project

Project Code: SFP-026A
Account Code: 20122013B10P301D43G000BZ00

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 soil samples:

12274100 12274101 12274102

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 National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC 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 the 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 was performed on 7/9/12 for gasoline range organics (unleaded gasoline composite) and the surrogate, 1,4-difluorobenzene. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of $\leq 15\%$ 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 the percent accuracies were 80-120% of the true values 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. TPH-Gx 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 criteria of 70-130% 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 analyses were performed using samples 12274101. All results which were above 5 times the reporting limit met the relative percent difference (RPD) criteria of $\leq 30\%$.

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 petroleum products, e.g. gasolines, naphtha, mineral spirits, Stoddard solvent, and other volatile petroleum products that generally elute before diesel from the gas chromatograph.

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 - 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-026A

Site : JEFFERSON AVE TBA

Contact : Joanne Labaw

Account : 20122013B10P301D43G000BZ00

Sample : 12274100

Description : TB04WT

Matrix : Water

Collected : 7/2/2012 10:25:00AM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	93	%Rec		7/9/12	1

Sample : 12274101

Description : MW10GW

Matrix : Water

Collected : 7/2/2012 12:40:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	79	%Rec		7/9/12	1

Sample : 12274102

Description : RS03WT

Matrix : Water

Collected : 7/2/2012 2:30:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	82	%Rec		7/9/12	1

Sample : 12274101 Sample Duplicate

Description : MW10GW

Matrix : Water

Collected : 7/2/2012 12:40:00PM

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	89	%Rec		7/9/12	1

Sample : KW070912B3 Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - 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	7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	78	%Rec		7/9/12	1

Sample : KW070912C6 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	85	%Rec		7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	90	%Rec		7/9/12	1

Sample : KW070912C7 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : TPH-Gx

Fraction : N/A

Prep Method: 5030 - Purge and Trap

Analysis Method: NWTPH-G - Gasoline range organics

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
*90209	TPH-Gx Gasoline Range Organics	81	%Rec		7/9/12	1
Surrogate Compounds:						
540363	Benzene, 1,4-difluoro-	90	%Rec		7/9/12	1



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MEMORANDUM

DATE: November 14, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington *MW*

TO: Linda Ader, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,
Jefferson Avenue Site, Tacoma, Washington**

REF: TDD: 12-01-0013 PAN: 002233.0765.01BR

The data summary check of one dissolved and one total water sample collected from the Jefferson Avenue site located in Tacoma, Washington, has been completed. Analysis for arsenic (EPA Method 200.8) was performed at the EPA Region 10 Laboratory, Port Orchard, Washington.

The samples were numbered: 12424300 12424301

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 Inorganic Results from the USEPA Region
10 Laboratory

PROJECT NAME: Jefferson Ave TBA

PROJECT CODE: SFP-026A

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

TO: Joanne LaBaw, Project Manager
Office of Environmental Cleanup, Assessment and
Brownfields Unit,
USEPA Region 10

CC: Renee Nordeen, E & E

I have authorized release of this data package. Attached you will find the Metals results for the Jefferson Ave TBA project for the samples received on 10/18/2012. 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: November 13, 2012

To: Joanne LaBaw, Project Manager
Office of Environmental Cleanup, Assessment and Brownfields Unit, US EPA Region 10

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

Subject: Quality Assurance Review of Jefferson Ave TBA For Arsenic

Project Code: SFP-026A
Account Code: 20122013B10P301D43G000BZ00

CC: Renee Nordeen, E & F

The following is a quality assurance review of the results of the analysis of 1 dissolved and 1 total water sample for Arsenic. These samples were submitted for the Jefferson Ave TBA 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:

Dissolved waters:

12424300

Total waters:

12424301

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.

All measures of quality control met Laboratory/QAPP criteria.

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has also been accredited to the standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt

Upon sample receipt, all conditions met Laboratory/QAPP requirements for this project.

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, where applicable.

3. Sample Preparation

Samples were prepared according to the method outlined in the SOP for these analytes for this type of matrix. All samples were digested following method 200.2. Direct analysis (analysis without digestion), which is an option for samples with turbidity less than 1 NTU, was not used in this case because there appeared to be a high bias in the arsenic results. This bias may have been due to carbonates in the water, which are removed during digestion. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification

The linear regression generated for the initial calibration met method criteria. The low point of the calibration curve is usually the Minimum Reporting Level (MRL) of the method. 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.

5. Laboratory Control Samples

All laboratory control sample results met the recovery acceptance criteria for the method. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis

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

7. Internal Standards

All internal standards met instrument response criteria.

8. Duplicate Analysis

Duplicate analysis was performed on samples 12424300 (dissolved) and 12424301 (total). Sample results which were greater than the LRS level were within the $\pm 20\%$ RPD requirement. No qualification was required based on duplicate analysis.

9. Matrix Spike/Matrix Spike Duplicate Analysis

Matrix spike analyses were performed on samples 12424300 (dissolved) and 12424301 (total). Sample results were within the 75-125% recovery requirements. No qualification was required based on matrix spike analyses.

10. Interferences

Serial dilution and interelement correction checks were analyzed to demonstrate that interferences were under control. All results of these checks met laboratory acceptance criteria.

11. Reporting Limits

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. No other data qualification was required.

The definition for the data qualifier is as follows:

U - The analyte was not detected at or above the reported value.

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.

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.

Low Range Standard (LRS) – A level where it has been demonstrated that the instrument achieves defined levels of accuracy and precision, as checked with the Low Range Standard during analysis.

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-026A

Site : JEFFERSON AVE TBA

Contact : Joanne Labaw

Account : 20122013B10P301D43G000BZ00

Sample : 12424300

Description : MW09GWD

Matrix : Filtered

Weight Basis : N/A

Collected : 10/18/2012 11:50:00AM

Parameter : ICP/MS

Fraction : Dissolved

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
7440382	Arsenic	42.9 ug/L		11/8/12	2.5

Sample : 12424301

Description : MW09GWT

Matrix : Water

Weight Basis : N/A

Collected : 10/18/2012 11:52:00AM

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
7440382	Arsenic	41.1 ug/L		11/8/12	2.5

Sample : 12424300 Sample Duplicate

Description : MW09GWD

Matrix : Filtered

Weight Basis : N/A

Collected : 10/18/2012 11:50:00AM

Parameter : ICP/MS

Fraction : Dissolved

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
7440382	Arsenic	43.2 ug/L		11/8/12	2.5

Sample : 12424301 Sample Duplicate

Description : MW09GWT

Matrix : Water

Weight Basis : N/A

Collected : 10/18/2012 11:52:00AM

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
7440382	Arsenic	41.4 ug/L		11/8/12	2.5

Sample : 12424300 Matrix Spike

Description : MW09GWD

Matrix : Filtered

Weight Basis : N/A

Collected : 10/18/2012 11:50:00AM

Parameter : ICP/MS

Fraction : Dissolved

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
7440382	Arsenic	102 %Rec		11/8/12	2.5

Sample : 12424301 Matrix Spike

Description : MW09GWT

Matrix : Water

Weight Basis : N/A

Collected : 10/18/2012 11:52:00AM

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
7440382	Arsenic	101 %Rec		11/8/12	2.5

Sample : 12424300 Matrix Spike#2

Description : MW09GWD

Matrix : Filtered

Weight Basis : N/A

Collected : 10/18/2012 11:50:00AM

Parameter : ICP/MS

Fraction : Dissolved

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
7440382	Arsenic	103 %Rec		11/8/12	2.5

Sample : 12424301 Matrix Spike#2

Description : MW09GWT

Matrix : Water

Weight Basis : N/A

Collected : 10/18/2012 11:52:00AM

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
7440382	Arsenic	102 %Rec		11/8/12	2.5

Sample : IW110712ABL Blank

Description : Blank

Matrix : Liquid

Weight Basis : N/A

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:					
7440382	Arsenic	0.63 ug/L	U	11/8/12	2.5

Sample : IW110712AL1 Lab Control Std

Description : Lab Control Standard

Matrix : Liquid

Weight Basis : N/A

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
7440382	Arsenic	101 %Rec		11/8/12	2.5

Sample : IW110712AL2 Lab Control Std#2

Description : Lab Control Standard Dup.

Matrix : Liquid

Weight Basis : N/A

Parameter : ICP/MS

Fraction : Total

Prep Method: 200.2 - Metals, total recoverable, water, soil, EMSL-CIN

Analysis Method: 200.8 - ICPMS 18 Elements

Analyte Code	Analyte Name	Result Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:					
7440382	Arsenic	101 %Rec		11/8/12	2.5

C

Chain-of-Custody Records

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USEPA CLP Organics COC (REGION COPY)

Date Shipped: 5/23/2012
 Carrier Name: FedEx
 Airbill No: 8704 8263 9646

CHAIN OF CUSTODY RECORD

Jefferson Avenue Site/WA

Case #:
 Cooler #:

Contact: EPW0018
 SDG# JRWP6

No: 10-052312-135314-0004

Lab: A4 Scientific
 Lab Contact: Laxmi Teerupalli
 Lab Phone: 281-292-5277

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	Sample Type
JRWWM1	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214500	05/21/2012 08:30	MJRWM1	Field Sample
JRWWM2	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214501	05/21/2012 09:00	MJRWM2	Field Sample
JRWWM3	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214502	05/21/2012 09:30	MJRWM3	Field Sample
JRWWM6	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214505	05/21/2012 11:02	MJRWM6	Field Sample
JRWWM7	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214506	05/21/2012 11:29	MJRWM7	Field Sample
JRWWM8	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214507	05/21/2012 11:53	MJRWM8	Field Sample
JRWP6	Ground Water/ J. Fetters	Grab	CLP TVSIM	2 (HCl) (3)	12214525	05/22/2012 15:30	MJRWP6	Field Sample
JRWP7	Ground Water/ J. Fetters	Grab	CLP ARO, CLP SVSIM, CLP TVSIM	1068 (Wet ice), 1069 (Wet ice), 1070 (HCl) (7)	12214526	05/22/2012 16:25	MJRWP7	Field Sample
JRWP8	Ground Water/ J. Fetters	Grab	CLP TVSIM	1074 (HCl) (3)	12214527	05/22/2012 15:45	MJRWP8	Field Sample
JRWP9	Ground Water/ J. Fetters	Grab	CLP TVSIM	1078 (HCl) (3)	12214528	05/22/2012 15:55	MJRWP9	Field Sample
JRWQ0	Ground Water/ J. Fetters	Grab	CLP TVSIM	1082 (HCl) (3)	12214529	05/22/2012 16:05	MJRWQ0	Field Sample

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 -04
 -05

Special Instructions:	Shipment for Case Complete? N
Additional Samples: <i>J. Fetters</i>	Samples Transferred From Chain of Custody #
Analysis Key: CLP TVOA=CLP TAL Volatiles Low Soil, CLP TVSIM=CLP TCL Trace Volatiles-SIM, CLP ARO=CLP Aroclors Modified, CLP SVSIM=CLP TCL Semivolatiles - SIM	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>[Signature]</i>	5/23/12	RD	5/24/12	9:51						
									RD	5/24/12	

000217

c

USEPA CLP Organics COC (REGION COPY)

Date Shipped: 5/23/2012

Carrier Name: FedEx

Airbill No: 8704 8263 9646

CHAIN OF CUSTODY RECORD

Jefferson Avenue Site/WA

Case #:

Cooler #:

0016008

Contract: EPW10018

SDG: JRWM1

No: 10-052312-135314-0004

Lab: A4 Scientific

Lab Contact: Laxmi Teerupalli

Lab Phone: 281-292-5277

See Ex
0016008-01
-02
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-05
-06
0016007-01
-02
-03
-04
-05

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	Sample Type
01 JRWM1	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214500	05/21/2012 08:30	MJRWM1	Field Sample
-02 JRWM2	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214501	05/21/2012 09:00	MJRWM2	Field Sample
-03 JRWM3	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214502	05/21/2012 09:30	MJRWM3	Field Sample
-04 JRWM6	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214505	05/21/2012 11:02	MJRWM6	Field Sample
-05 JRWM7	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214506	05/21/2012 11:29	MJRWM7	Field Sample
-06 JRWM8	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	N2 (Wet ice), N3 (Wet ice) (4)	12214507	05/21/2012 11:53	MJRWM8	Field Sample
01 JRWP6	Ground Water/ J. Fetters	Grab	CLP TVSIM	2 (HCl) (3)	12214525	05/22/2012 15:30	MJRWP6	Field Sample
-02 JRWP7	Ground Water/ J. Fetters	Grab	CLP ARO, CLP SVSIM, CLP TVSIM	1068 (Wet ice), 1069 (Wet ice), 1070 (HCl) (7)	12214526	05/22/2012 16:25	MJRWP7	Field Sample
-03 JRWP8	Ground Water/ J. Fetters	Grab	CLP TVSIM	1074 (HCl) (3)	12214527	05/22/2012 15:45	MJRWP8	Field Sample
-04 JRWP9	Ground Water/ J. Fetters	Grab	CLP TVSIM	1078 (HCl) (3)	12214528	05/22/2012 15:55	MJRWP9	Field Sample
-05 JRWQ0	Ground Water/ J. Fetters	Grab	CLP TVSIM	1082 (HCl) (3)	12214529	05/22/2012 16:05	MJRWQ0	Field Sample

Special Instructions: Additional sampler: <i>J. E. Adm</i>	Shipment for Case Complete? N
Analysis Key: CLP TVOA=CLP TAL Volatiles Low Soil, CLP TVSIM=CLP TCL Trace Volatiles-SIM, CLP ARO=CLP Aroclors Modified, CLP SVSIM=CLP TCL Semivolatiles - SIM	Samples Transferred From Chain of Custody #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. E. Adm</i>	5/23/12	<i>RD</i>	5/24/12	9:51						

0016008

USEPA CLP Organics COC (REGION COPY)

Date Shipped: 5/23/2012
 Carrier Name: FedEx
 Airbill No: 8704 8263 9598

CHAIN OF CUSTODY RECORD

Jefferson Avenue Site/WA

Case #:
 Cooler #:

0016016
 Contract # EPW0018
 RD & JRWP

No: 10-052312-150739-0011

Lab: A4 Scientific
 Lab Contact: Laxmi Teerupalli
 Lab Phone: 281-292-5277

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	Sample Type
JRWN7	Soil/ J. Fetters	Grab	CLP PEST	N1 (Wet ice) (1)	12214516	05/21/2012 16:05		Field Sample
JRWN8	Soil/ J. Fetters	Grab	CLP PEST	N1 (Wet ice) (1)	12214517	05/21/2012 16:25		Field Sample
JRWP1	Soil/ J. Fetters	Grab	CLP PEST	N1 (Wet ice) (1)	12214520	05/21/2012 16:50		Field Sample
JRWP2	Soil/ D. Pulvino	Grab	CLP PEST	N1 (Wet ice) (1)	12214521	05/21/2012 17:10		Field Sample
JRWP3	Soil/ J. Fetters	Grab	CLP PEST	N1 (Wet ice) (1)	12214522	05/21/2012 17:30		Field Sample
JRWS1	Soil/ L. Ader	Grab	ARO SVOC	1200 (Wet ice) (1)	12214550	05/22/2012 11:15	MJRWS1	Field Sample
JRWS2	Soil/ L. Ader	Grab	ARO SVOC	1204 (Wet ice) (1)	12214551	05/22/2012 14:45	MJRWS2	Field Sample
JRWS3	Soil/ L. Ader	Grab	ARO SVOC	1208 (Wet ice) (1)	12214552	05/22/2012 15:00	MJRWS3	Field Sample
JRWS6	Waste Water/ J. Fetters	Grab	CLP ARO	1172 (Wet ice) (2)	12214555	05/22/2012 14:10	MJRWS6	Field Sample
JRWT1	Ground Water/ L. Ader	Grab	CLP SVSIM	1213 (Wet ice) (2)	12214554	05/22/2012 11:45	MJRWT1	

016007-07
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 0016016-02
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Special Instructions: Additional Samples: <i>J. Ader</i>	Shipment for Case Complete? N
Analysis Key: CLP PEST=CLP TCL Pesticides, ARO SVOC=CLP Aroclors & SVOC low SIM, CLP ARO=CLP Aroclors Modified, CLP SVSIM=CLP TCL Semivolatiles - SIM	Samples Transferred From Chain of Custody #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Ader</i>	5/23/12	RD	5/24/12	9:51						

000300

D

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 10-052412-140420-0013

Date Shipped: 5/24/2012

Lab: Bonner Analytical Testing Company

Carrier Name: FedEx

Case #: 42569

Lab Contact: Patricia Aiken

Airbill No: 8704 0553 3623

Additional Sampler



Lab Phone: 601-264-2854

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	For Lab Use Only
MJRWM3	Soil/ J. Fetters	Grab	ICP-AES	N1 (Wet ice) (1)	12214502	05/21/2012 09:30	JRWM3	
MJRWM6	Soil/ J. Fetters	Grab	ICP-AES	N1 (Wet ice) (1)	12214505	05/21/2012 11:02	JRWM6	
MJRWM7	Soil/ J. Fetters	Grab	ICP-AES	N1 (Wet ice) (1)	12214506	05/21/2012 11:29	JRWM7	
MJRWM8	Soil/ J. Fetters	Grab	ICP-AES	1094 (Wet ice) (1)	12214507	05/21/2012 11:53	JRWM8	
MJRWP6	Ground Water/ J. Fetters	Grab	ICP-AES	3 (HNO3 pH<2) (1)	12214525	05/22/2012 15:30	JRWP6	
MJRWP7	Ground Water/ J. Fetters	Grab	ICP-AES	1071 (HNO3 pH<2) (1)	12214526	05/22/2012 16:25	JRWP7	
MJRWP8	Ground Water/ J. Fetters	Grab	ICP-AES	1075 (HNO3 pH<2) (1)	12214527	05/22/2012 15:45	JRWP8	
MJRWP9	Ground Water/ J. Fetters	Grab	ICP-AES	1079 (HNO3 pH<2) (1)	12214528	05/22/2012 15:55	JRWP9	
MJRWQ0	Ground Water/ J. Fetters	Grab	ICP-AES	1083 (HNO3 pH<2) (1)	12214529	05/22/2012 16:05	JRWQ0	
MJRWQ1	Ground Water/ J. Fetters	Grab	ICP-AES	1087 (HNO3 pH<2) (1)	12214530	05/22/2012 16:14	JRWQ1	
MJRWQ7	Soil/ J. Fetters	Grab	ICP-AES	1117 (Wet ice) (1)	12214536	05/23/2012 14:26	JRWQ7	
MJRWQ8	Soil/ J. Fetters	Grab	ICP-AES	1121 (Wet ice) (1)	12214537	05/23/2012 14:45	JRWQ8	
MJRWS2	Soil/ L. Ader	Grab	ICP-AES	1205 (Wet ice) (1)	12214551	05/22/2012 14:45	JRWS2	
MJRWS3	Soil/ L. Ader	Grab	ICP-AES	1209 (Wet ice) (1)	12214552	05/22/2012 15:00	JRWS3	

Special Instructions:	6°C	Shipment for Case Complete? N
		Samples Transferred From Chain of Custody #
Analysis Key: ICP-AES=CLP TAL Total Metals/ICP-AES		

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Fetters</i>	5/20/12							<i>P. Aiken</i>	5-26-12	11:15

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

MJRWP6
No: 10-052412-140420-0013

Date Shipped: 5/24/2012

Lab: Bonner Analytical Testing Company

Carrier Name: FedEx

Case #: 42569

Lab Contact: Patricia Aiken

Airbill No: 8704 0553 3623

Additional Sampler

[Signature]

Lab Phone: 601-264-2854

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	For Lab Use Only
MJRWM3	Soil/ J. Fetters	Grab	ICP-AES	N1 (Wet ice) (1)	12214502	05/21/2012 09:30	JRWM3	
MJRWM6	Soil/ J. Fetters	Grab	ICP-AES	N1 (Wet ice) (1)	12214505	05/21/2012 11:02	JRWM6	
MJRWM7	Soil/ J. Fetters	Grab	ICP-AES	N1 (Wet ice) (1)	12214506	05/21/2012 11:29	JRWM7	
MJRWM8	Soil/ J. Fetters	Grab	ICP-AES	1094 (Wet ice) (1)	12214507	05/21/2012 11:53	JRWM8	
MJRWP6	Ground Water/ J. Fetters	Grab	ICP-AES	3 (HNO3 pH<2) (1)	12214525	05/22/2012 15:30	JRWP6	
MJRWP7	Ground Water/ J. Fetters	Grab	ICP-AES	1071 (HNO3 pH<2) (1)	12214526	05/22/2012 16:25	JRWP7	
MJRWP8	Ground Water/ J. Fetters	Grab	ICP-AES	1075 (HNO3 pH<2) (1)	12214527	05/22/2012 15:45	JRWP8	
MJRWP9	Ground Water/ J. Fetters	Grab	ICP-AES	1079 (HNO3 pH<2) (1)	12214528	05/22/2012 15:55	JRWP9	
MJRWQ0	Ground Water/ J. Fetters	Grab	ICP-AES	1083 (HNO3 pH<2) (1)	12214529	05/22/2012 16:05	JRWQ0	
MJRWQ1	Ground Water/ J. Fetters	Grab	ICP-AES	1087 (HNO3 pH<2) (1)	12214530	05/22/2012 16:14	JRWQ1	
MJRWQ7	Soil/ J. Fetters	Grab	ICP-AES	1117 (Wet ice) (1)	12214536	05/23/2012 14:26	JRWQ7	
MJRWQ8	Soil/ J. Fetters	Grab	ICP-AES	1121 (Wet ice) (1)	12214537	05/23/2012 14:45	JRWQ8	
MJRWS2	Soil/ L. Ader	Grab	ICP-AES	1205 (Wet ice) (1)	12214551	05/22/2012 14:45	JRWS2	
MJRWS3	Soil/ L. Ader	Grab	ICP-AES	1209 (Wet ice) (1)	12214552	05/22/2012 15:00	JRWS3	

Special Instructions: <i>QC = MJRWP6</i>	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key: ICP-AES=CLP TAL Total Metals/ICP-AES	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>[Signature]</i>	5/20/12							<i>[Signature]</i>	5-20-12	11:15

Original located in Car: 42569 SDG + JRWQ2

0016020
 Contract: EPW10018
 SDG: JRWQ2
 JRWR1

Rec'd 5/25/12

USEPA CLP Organics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 10-052412-143604-0014

Date Shipped: 5/24/2012

Additional Sampler *Lizbeth E. Ad...*

Lab: A4 Scientific

Carrier Name: FedEx

Case #: 42569

Lab Contact: Laxmi Teerupalli

Airbill No: 8764 0553 3612

Lab Phone: 281-292-5277

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	For Lab Use Only
JRWQ2	Soil/ J. Feters	Grab	CLP TVOA, CLP TVOA	1090 (Wet ice), 1091 (Wet ice) (10)	12214531	05/23/2012 10:15	MJRWQ2	0016015-01
JRWQ3	Soil/ J. Feters	Grab	CLP TVOA, CLP TVOA	1097 (Wet ice), 1098 (Wet ice) (4)	12214532	05/23/2012 10:25	MJRWQ3	-02
JRWQ4	Soil/ J. Feters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1100 (Wet ice), 1102 (Wet ice), 1103 (Wet ice) (5)	12214533	05/23/2012 10:30	MJRWQ4	-03
JRWQ6	Soil/ J. Feters	Grab	CLP TVOA, CLP TVOA	1110 (Wet ice), 1111 (Wet ice) (4)	12214535	05/23/2012 14:14	MJRWQ6	-04
JRWQ7	Soil/ J. Feters	Grab	CLP TVOA, CLP TVOA	1118 (Wet ice), 1119 (Wet ice) (4)	12214536	05/23/2012 14:26	MJRWQ7	-05
JRWQ8	Soil/ J. Feters	Grab	CLP TVOA, CLP TVOA	1122 (Wet ice), 1123 (Wet ice) (4)	12214537	05/23/2012 14:45	MJRWQ8	-06
JRWR0	Soil/ J. Feters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1128 (Wet ice), 1130 (Wet ice), 1131 (Wet ice) (5)	12214539	05/24/2012 09:28	MJRWR0	-07
JRWR1	Soil/ J. Feters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1132 (Wet ice), 1134 (Wet ice), 1135 (Wet ice) (12)	12214540	05/24/2012 09:42	MJRWR1	0016020-08 -01
JRWR2	Soil/ J. Feters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1136 (Wet ice), 1138 (Wet ice), 1139 (Wet ice) (6)	12214541	05/24/2012 10:05	MJRWR2	-09

118.8x
in SDG

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Sample(s) to be used for Lab QC: JRWQ2, JRWR1, JRWR2	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key: CLP TVOA=CLP TAL Volatiles Low Soil, ARO SVOC=CLP Aroclors & SVOC low SIM	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>[Signature]</i>	5/23/12	RD	05/25/12	9:25						
							RD	05/25/12			

00022

Contract: EPW10018
SDG: JRWQ23

USEPA CLP Organics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 10-052412-143604-0014

Date Shipped: 5/24/2012

Additional Sampler *Jamie E. Ad*

per elkin

Lab: A4 Scientific

Carrier Name: FedEx

Case #: 42569

Lab Contact: Laxmi Teerupalli

Airbill No: 8764 0553 3612

Lab Phone: 281-292-5277

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	For Lab Use Only
JRWQ2	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1090 (Wet ice), 1091 (Wet ice) (10)	12214531	05/23/2012 10:15	MJRWQ2	0016015-01
JRWQ3	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1097 (Wet ice), 1098 (Wet ice) (4)	12214532	05/23/2012 10:25	MJRWQ3	0016015-02
JRWQ4	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1100 (Wet ice), 1102 (Wet ice), 1103 (Wet ice) (5)	12214533	05/23/2012 10:30	MJRWQ4	-03
JRWQ6	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1110 (Wet ice), 1111 (Wet ice) (4)	12214535	05/23/2012 14:14	MJRWQ6	-04
JRWQ7	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1118 (Wet ice), 1119 (Wet ice) (4)	12214536	05/23/2012 14:26	MJRWQ7	-05
JRWQ8	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1122 (Wet ice), 1123 (Wet ice) (4)	12214537	05/23/2012 14:45	MJRWQ8	-06
JRWR0	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1128 (Wet ice), 1130 (Wet ice), 1131 (Wet ice) (5)	12214539	05/24/2012 09:28	MJRWR0	0016015-07
JRWR1	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1132 (Wet ice), 1134 (Wet ice), 1135 (Wet ice) (12)	12214540	05/24/2012 09:42	MJRWR1	-08
JRWR2	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1136 (Wet ice), 1138 (Wet ice), 1139 (Wet ice) (6)	12214541	05/24/2012 10:05	MJRWR2	-09

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per elkin

per elkin

Sample(s) to be used for Lab QC: JRWQ2, JRWR1, JRWR2	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #

Analysis Key: CLP TVOA=CLP TAL Volatiles Low Soil, ARO SVOC=CLP Aroclors & SVOC low SIM

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>[Signature]</i>	5/24/12	RD	05/25/12	9:25						
							RD	05/25/12			

00013

0016024
 Contract: EPW10018
 SDG: JRWQ23

USEPA CLP Organics COC (LAB COPY)

Date Shipped: 5/24/2012
 Carrier Name: FedEx
 Airbill No: 8764 0553 3612

CHAIN OF CUSTODY RECORD

Additional Sampler *Laxmi Teerupalli*
 Case #: 42569

No: 10-052412-143604-0014
 Lab: A4 Scientific
 Lab Contact: Laxmi Teerupalli
 Lab Phone: 281-292-5277

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	For Lab Use Only
JRWQ2	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1090 (Wet ice), 1091 (Wet ice) (10)	12214531	05/23/2012 10:15	MJRWQ2	0016024-01 24
JRWQ3	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1097 (Wet ice), 1098 (Wet ice) (4)	12214532	05/23/2012 10:25	MJRWQ3	-02
JRWQ4	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1100 (Wet ice), 1102 (Wet ice), 1103 (Wet ice) (5)	12214533	05/23/2012 10:30	MJRWQ4	-03
JRWQ6	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1110 (Wet ice), 1111 (Wet ice) (4)	12214535	05/23/2012 14:14	MJRWQ6	0016024-02 -04
JRWQ7	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1118 (Wet ice), 1119 (Wet ice) (4)	12214536	05/23/2012 14:26	MJRWQ7	-05 -08
JRWQ8	Soil/ J. Fetters	Grab	CLP TVOA, CLP TVOA	1122 (Wet ice), 1123 (Wet ice) (4)	12214537	05/23/2012 14:45	MJRWQ8	-06 -04
JRWR0	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1128 (Wet ice), 1130 (Wet ice), 1131 (Wet ice) (5)	12214539	05/24/2012 09:28	MJRWR0	-07
JRWR1	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1132 (Wet ice), 1134 (Wet ice), 1135 (Wet ice) (12)	12214540	05/24/2012 09:42	MJRWR1	-08
JRWR2	Soil/ J. Fetters	Grab	ARO SVOC, CLP TVOA, CLP TVOA	1136 (Wet ice), 1138 (Wet ice), 1139 (Wet ice) (6)	12214541	05/24/2012 10:05	MJRWR2	-09

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Re 5/24/12

Sample(s) to be used for Lab QC: JRWQ2, JRWR1, JRWR2	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key: CLP TVOA=CLP TAL Volatiles Low Soil, ARO SVOC=CLP Aroclors & SVOC low SIM	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>[Signature]</i>	5/24/12	RD	05/25/12	9:25						
							RD	05/25/12			

00016

16025-B

USEPA CLP Organics COC (LAB COPY)

Date Shipped: 5/29/12 *5/29/12 J. Aden*
 Carrier Name: FedEx
 Airbill No: 8764 0553 3575

CHAIN OF CUSTODY RECORD

Additional Sampler *Reid E. Aden*
 Case #: 42569

Contract # EPW10018
 SDG: JRWQ5

No: 10-052512-161702-0021

Lab: A4 Scientific
 Lab Contact: Laxmi Teerupalli
 Lab Phone: 281-292-5277

Organic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Inorganic Sample #	For Lab Use Only
JRWQ5	Ground Water/ J. Fetters	Grab	CLP TVSIM	1106 (HCl) (9)	12214534	05/24/2012 18:14	MJRWQ5	0016025-01
JRWQ9	Ground Water/ J. Fetters	Grab	CLP TVSIM	1126 (HCl) (3)	12214538	05/24/2012 18:58	MJRWQ9	-02
JRWR3	Ground Water/ J. Fetters	Grab	CLP ARO, CLP SVSIM, CLP TVSIM	1140 (Wet ice), 1141 (Wet ice), 1142 (HCl) (7)	12214542	05/25/2012 13:50	MJRWR3	-03
JRWS7	Waste Water/ J. Fetters	Grab	CLP TVSIM	1179 (HCl) (3)	12214556	05/24/2012 16:40		-05
JRWS9	Water/ J. Fetters	Grab	CLP SVSIM	1188 (Wet ice) (2)	12214558	05/24/2012 10:35	MJRWS9	-06
JRWT2	Water/ J. Fetters	Grab	CLP TVSIM	1199 (HCl) (3)	12214561	05/24/2012 17:25		-07
JRWT3	Waste Water/ J. Fetters	Grab	CLP TVSIM	1222 (HCl) (3)	12214562	05/24/2012 16:50		-08
JRWT4	Waste Water/ J. Fetters	Grab	CLP TVSIM	1226 (HCl) (3)	12214563	05/24/2012 17:00		-09
JRWT5	Waste Water/ J. Fetters	Grab	CLP TVSIM, CLP ARO	1228 (HCl), 1234 (Wet ice) (5)	12214564	05/25/2012 12:18		-10
JRWT6	Waste Water/ J. Fetters	Grab	CLP TVSIM	1231 (HCl) (2)	12214565	05/25/2012 10:15	MJRWT6	-11

Sample(s) to be used for Lab QC: JRWQ5	Shipment for Case Complete? <i>NY JA</i>
	Samples Transferred From Chain of Custody #
Analysis Key: CLP TVSIM=CLP TCL Trace Volatiles-SIM, CLP ARO=CLP Aroclors Modified, CLP SVSIM=CLP TCL Semivolatiles - SIM	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>[Signature]</i>	5/29/12	<i>[Signature]</i>	05/30/12	10:17						

00019

USEPA CLP Inorganics COC (LAB COPY)

Date Shipped: 5/29/2012

Carrier Name: FedEx

Airbill No: 8704 0553 3586

CHAIN OF CUSTODY RECORD

Case #: 42569

Additional Sampler *Linda Ader*

MJRWM1

No: 10-052512-164438-0022

Lab: Bonner Analytical Testing Company

Lab Contact: Patricia Aiken

Lab Phone: 601-264-2854

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	For Lab Use Only
MJRWM1	Soil/ J. Feters	Grab	ICP-AES	N1 (Wet ice) (1)	12214500	05/21/2012 08:30	JRWM1	<i>Good</i>
MJRWM2	Soil/ J. Feters	Grab	ICP-AES	N1 (Wet ice) (1)	12214501	05/21/2012 09:00	JRWM2	
MJRWQ2	Soil/ J. Feters	Grab	ICP-AES	1089 (Wet ice) (1)	12214531	05/23/2012 10:15	JRWQ2	
MJRWQ3	Soil/ J. Feters	Grab	ICP-AES	1096 (Wet ice) (1)	12214532	05/23/2012 10:25	JRWQ3	
MJRWQ4	Soil/ J. Feters	Grab	ICP-AES	1101 (Wet ice) (1)	12214533	05/23/2012 10:30	JRWQ4	
MJRWQ5	Ground Water/ J. Feters	Grab	ICP-AES	1107 (HNO3 pH<2) (2)	12214534	05/24/2012 18:14	JRWQ5	
MJRWQ6	Soil/ J. Feters	Grab	ICP-AES	1109 (Wet ice) (1)	12214535	05/23/2012 14:14	JRWQ6	
MJRWQ9	Ground Water/ J. Feters	Grab	ICP-AES	1127 (HNO3 pH<2) (1)	12214538	05/24/2012 18:58	JRWQ9	
MJRWR0	Soil/ J. Feters	Grab	ICP-AES	1129 (Wet ice) (1)	12214539	05/24/2012 09:28	JRWR0	
MJRWR1	Soil/ J. Feters	Grab	ICP-AES	1133 (Wet ice) (1)	12214540	05/24/2012 09:42	JRWR1	
MJRWR2	Soil/ J. Feters	Grab	ICP-AES	1137 (Wet ice) (1)	12214541	05/24/2012 10:05	JRWR2	
MJRWR3	Ground Water/ J. Feters	Grab	ICP-AES	1143 (HNO3 pH<2) (1)	12214542	05/25/2012 13:50	JRWR3	
MJRWS1	Soil/ L. Ader	Grab	ICP-AES	1201 (Wet ice) (1)	12214550	05/22/2012 11:15	JRWS1	
MJRWT6	Waste Water/ J. Feters	Grab	ICP-AES	1232 (HNO3 pH<2) (1)	12214565	05/25/2012 10:15	JRWT6	

Sample(s) to be used for Lab QC: MJRWQ2, MJRWQ5, MJRWR1 <i>5°C</i>	Shipment for Case Complete? Y
	Samples Transferred From Chain of Custody #
Analysis Key: ICP-AES=CLP TAL Total Metals/ICP-AES	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Feters</i>	<i>7/17</i>	<i>J. Feters</i>						<i>P. Aiken</i>	<i>5-30-12</i>	<i>09:26</i>

D

Sample Plan Alteration Forms

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SAMPLE PLAN ALTERATION FORM

Project Name and Number: Jefferson Avenue Site – 12-01-0013

Material to be Sampled:

Soil samples from Geoprobe™ borings.

Measurement Parameters:

No changes.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

No changes.

Reason for Change in Field Procedure or Analytical Variation:

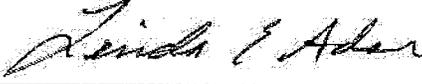
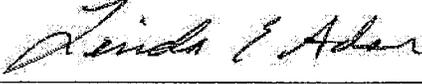
The proposed depth of the Geoprobe™ borings of 16 feet below ground surface (bgs) could not be reached due to extremely dense soil conditions. Each boring was drilled to 12 feet bgs instead. Further, at all borings, three soil samples were collected from each boring rather the four per boring.

Variation from Field or Analytical Procedure:

Geoprobe™ borings were advanced to 12 feet bgs rather than 16 feet bgs.

Special Equipment, Materials, or Personnel Required:

None.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Linda Ader		6/4/12
START PL: Linda Ader		6/4/12
EPA TM: Joanne LaBaw		6/13/12
EPA QA Manager : Gina Grepa-Grove		06/14/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Jefferson Avenue Site – 12-01-0013

Material to be Sampled:

Investigation-derived waste (IDW) samples.

Measurement Parameters:

No changes.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

IDW samples were proposed for analysis of gasoline-range petroleum hydrocarbons (GRO), diesel-range petroleum hydrocarbons (DRO), target analyte list (TAL) metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs).

Reason for Change in Field Procedure or Analytical Variation:

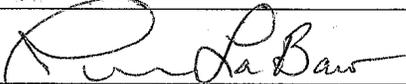
More IDW samples were required than anticipated since more drums of IDW were generated than expected. Since more samples were required, a disposal facility was contacted to determine whether the applied analytical suite could be reduced. Based on this conversation, it was determined that TAL metals results from soil samples collected from the borings could be used to provide an indication of metals concentrations in purge water. For this reason, the only IDW water sample that required TAL metals analysis was the one drum containing purge water from a well boring (MW10) that didn't include soil sampling. In addition, the analytical suite for all IDW water was reduced to GRO, DRO, and VOCs; however, PCBs were included for IDW water from monitoring wells that may be near hydraulic hoists.

Variation from Field or Analytical Procedure:

More IDW samples were collected than proposed and the analytical suite for some samples was reduced. The analytical suite was reduced for five of six samples.

Special Equipment, Materials, or Personnel Required:

None.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Linda Ader		6/4/12
START PL: Linda Ader		6/4/12
EPA TM: Joanne LaBaw		6/13/12
EPA QA Manager : Gina Grepa-Grove		06/14/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Jefferson Avenue Site – 12-01-0013

Material to be Sampled:

Samples of opportunity from borings.

Measurement Parameters:

No changes.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

No changes.

Reason for Change in Field Procedure or Analytical Variation:

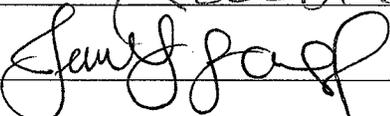
There was no perceived need to install additional borings in order to collect samples of opportunity. However, since petroleum-contaminated soils were encountered during exploratory trenching activities, samples of opportunity were collected from two excavations: three soil samples and one water sample. All samples of opportunity were submitted for analyses of volatile organic compounds (VOCs), semivolatile organic compounds, polychlorinated biphenyls, Target Analyte List metals, gasoline-range total petroleum hydrocarbons (GRO), and diesel-range total petroleum hydrocarbons. Two soils samples were collected from the backhoe bucket at areas not in contact with the bucket. One soil sample was collected directly from soil removed from an excavation. Samples for VOCs and GRO analysis were collected directly into Core-in-One™ samplers. Then additional material was collected using a dedicated stainless steel spoon into a dedicated stainless steel bowl, homogenized, and then placed into pre-cleaned sample containers. The water sample was collected from an excavation directly into pre-cleaned sample containers.

Variation from Field or Analytical Procedure:

The equipment used to collect samples of opportunity was modified.

Special Equipment, Materials, or Personnel Required:

A backhoe was required to collect two soil samples from an excavation since the depth of the excavation was too great for entry.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Linda Ader		6/4/12
START PL: Linda Ader		6/4/12
EPA TM: Joanne LaBaw		6/13/12
EPA QA Manager : Gina Grepa-Grove		06/14/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Jefferson Avenue Site – 12-01-0013

Material to be Sampled:

No changes.

Measurement Parameters:

No changes.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

No changes.

Reason for Change in Field Procedure or Analytical Variation:

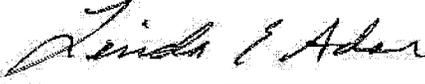
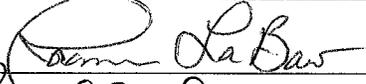
Ground water was not encountered at the expected depth.

Variation from Field or Analytical Procedure:

All three new monitoring wells along South Jefferson Avenue were to be installed to 13 feet below ground surface (bgs) and screened from 3 to 13 feet bgs. One of these wells was drilled to 23 feet bgs and screened from 3 to 23 feet bgs since ground water was not encountered until 19.5 feet bgs. In addition, the depth of the new monitoring well at 2105 Tacoma Avenue South was drilled to 30 feet bgs. The expected depth of this well was not discussed in the sampling plan.

Special Equipment, Materials, or Personnel Required:

None.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Linda Ader		6/4/12
START PL: Linda Ader		6/4/12
EPA TM: Joanne LaBaw		6/13/12
EPA QA Manager : Gina Grepa-Grove		06/14/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Jefferson Avenue Site – 12-01-0013

Material to be Sampled:

Ground water.

Measurement Parameters:

Total and dissolved Arsenic by EPA CLP SOW ISM01.3 (ICP-MS).

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Monitoring well MW9 will be purged of three volumes of water, and then sampled using low flow techniques. Samples for dissolved arsenic will be filtered in the field using a 45-micron in-line dedicated filter. Both total and dissolved aliquots will be collected directly into 1-liter polys that have been pre-preserved with HNO₃.

Reason for Change in Field Procedure or Analytical Variation:

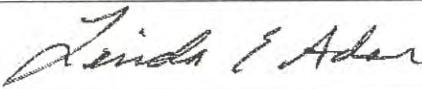
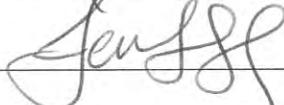
The concentration of total arsenic from MW9 exceeded the Washington State Department of Ecology Method A cleanup standard. Resampling of this well is required to confirm the concentration of arsenic at this location.

Variation from Field or Analytical Procedure:

Analysis for dissolved arsenic was not included in the original Sampling and Quality Assurance Plan.

Special Equipment, Materials, or Personnel Required:

None.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Linda Ader		10/9/12
START PL: Linda Ader		10/9/12
EPA TM: Joanne LaBaw		10/9/2012
EPA QA Manager : Gina Grepa-Grove		10/9/2012

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E

Borehole/Monitoring Well Logs

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Drilling Log for _____ JA01 _____

Project Name: _____ Jefferson Avenue Site _____

Site Location: _____ Tacoma, Washington _____

Date Started/Finished: _____

Driller's Name: _____ Alan Jensen _____

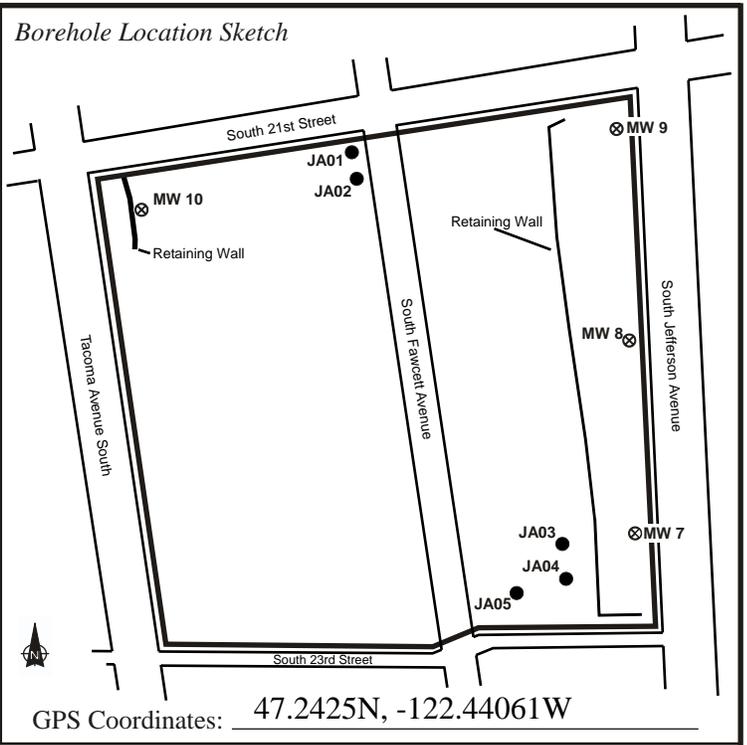
Geologist's Name: _____ Jeff Fetters _____

Geologist's Signature: _____

Rig Type(s): _____ Geoprobe _____

Depth to Water: _____ Not Measured _____

Total Depth of Borehole: _____ 14' bgs _____



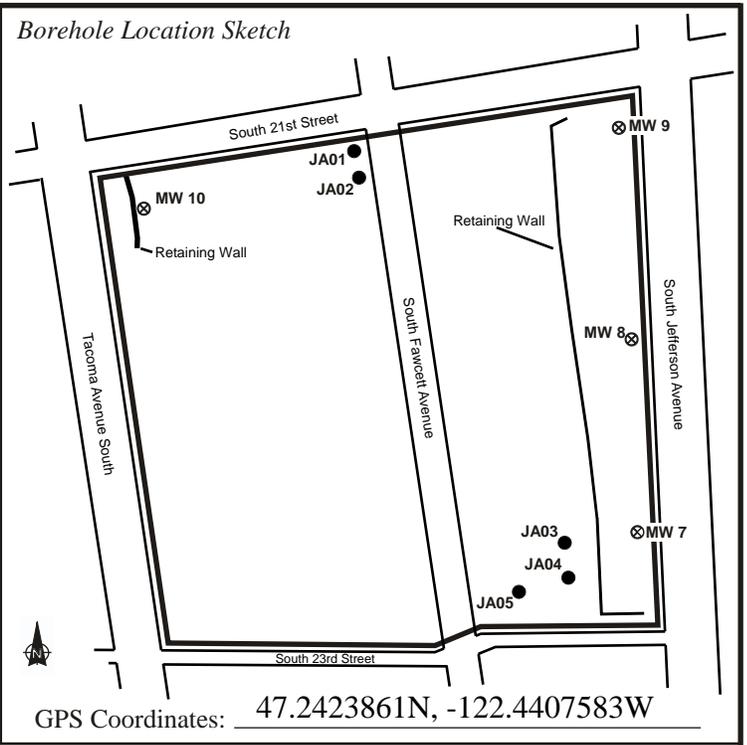
Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
1	JA01-SB04	08:30	100%		0-6" - SILT w/ SAND (MLS),
2					0.5'-1' - SANDY SILT w/ GRAVEL (MLS), Silt: grayish brown, moist; Gravel: 2mm - 2cm, rounded; Sand: fine to medium, angular.
3					1-2' - SANDY GRAVEL (GWS) SILT trace , Gravel: 2.5cm-2mm, rounded; Sand: fine, Silt: brown, moist.
4	JA01-SB08	09:00	75%		2-4' - SILT w/ SAND (MLS) GRAVEL trace , Silt: grayish brown, moist; Sand: fine, angular; Gravel: 2.5cm-2mm, rounded.
5					4-6' - SILT w/ SAND trace GRAVEL (ML), Silt: grayish brown, moist; Sand: fine, angular; Gravel: 2.5cm-2mm, rounded.
6					6-6.5' - SAND w/ SILT (SW-SM), Sand: medium to fine, angular; Silt: grayish brown, saturated.
7	JA01-SB12	09:30	75%		6.5-8' - SILTY SAND w/ GRAVEL (SM), Sand: medium to fine, angular to sub-angular; Silt: Grayish brown, moist; Gravel: >3cm-2mm, rounded.
8					8-12' - SILTY SAND w/ GRAVEL (SM), Sand: medium to fine, angular to sub-angular; Silt: Grayish brown, moist; Gravel: decrease to trace, 1cm-2mm, rounded.
9					
10					
11					
12					

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
12					12-14' - SILTY SAND w/ GRAVEL (SM), Sand: medium to fine, angular to sub-angular; Silt: Grayish brown, moist; Gravel: decrease to trace, 1cm-2mm, rounded.
13					
14					
15					TD = 14 feet bgs Borehole back filled with bentonite grout from TD to surface.
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					



Drilling Log for _____ JA02 _____

Project Name: _____ Jefferson Avenue Site _____
 Site Location: _____ Tacoma, Washington _____
 Date Started/Finished: _____ 5-21-2012 _____
 Driller's Name: _____ Alan Jensen _____
 Geologist's Name: _____ Jeff Fetters _____
 Geologist's Signature: _____ _____
 Rig Type(s): _____ Geoprobe _____
 Depth to Water: _____ Not Measured _____
 Total Depth of Borehole: _____ 12' bgs _____



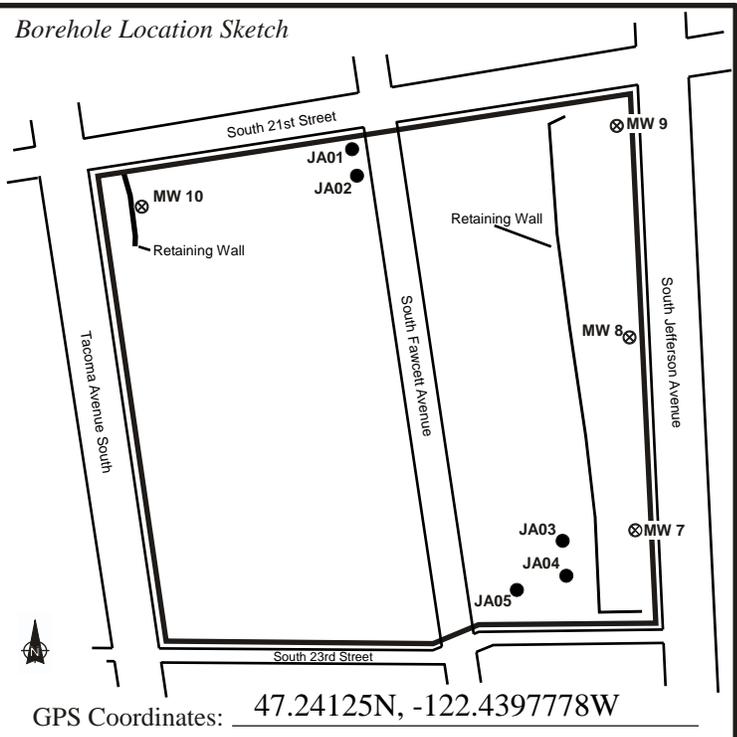
Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
1	JA02-SB04	11:02	100%		0-1' - SAND w/ SILT (SW-SM), Sand: medium to fine, angular; Silt: Grayish brown, saturated.
2					1-4' - SILTY SAND W/ GRAVEL(SM), Silt: grayish brown, dry; Sand: medium to fine, angular; Gravel: 1cm-2mm, rounded.
3					
4	JA02-SB08	11:29	75%		4-4.5' - SILTY SAND w/ GRAVEL (SM), Silt: grayish brown, dry; Sand: medium to fine, angular; Gravel: 1cm-2mm, rounded.
5					5-8' - SILTY SAND w/ GRAVEL (SM), Silt: grayish brown, moist; Sand: medium to fine, angular; Gravel: 5cm-2mm, rounded.
6					
7	JA02-SB012	11:53	75%		8-12' - SILTY SAND w/ GRAVEL (SM), Sand: medium to fine, angular to sub-angular; Silt: Grayish brown, dry; Gravel: decrease to trace, 4cm-2mm (predominantly < 0.5cm), rounded.
8					
9					
10					
11					
12					Refusal at 14' bgs; TD = 14 feet bgs Borehole back filled with bentonite grout from TD to surface.

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					



Drilling Log for _____ JA03 _____

Project Name: _____ Jefferson Avenue Site _____
 Site Location: _____ Tacoma, Washington _____
 Date Started/Finished: _____ 5-21-12 _____
 Driller's Name: _____ Alan Jensen _____
 Geologist's Name: _____ Jeff Fetters _____
 Geologist's Signature: _____ _____
 Rig Type(s): _____ Geoprobe _____
 Depth to Water: _____ Not Measured _____
 Total Depth of Borehole: _____ 12' bgs _____



Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
1	JA03-SB04	14:55	100%		0-1' - SANDY SILT (MLS), Medium brown, organics, 0-0.2' moist, 0.2'-1' dry, trace gravel.
2					1-4' - SANDY SILT (MLS), Light brown, organics, shell fragments noted from 1-3' bgs, orange mottling from 3-3.5' bgs, dry, trace gravel.
3					
4	JA03-SB08	15:10	75%		4-4.5' - Lithology same as above.
5					4.5-8' - SAND w/ SILT trace GRAVEL (SW-SM), Sand: medium to fine, angular; Silt: brown, dry; Gravel: 1cm-2mm, rounded.
6					
7	JA03-SB12	15:30	100%		8-12' - Lithology same as above.
8					
9					
10					Refusal at 12' bgs; TD = 12 feet bgs
11					Borehole back filled with bentonite grout from TD to surface.
12					

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					



Drilling Log for JA04

Project Name: Jefferson Avenue Site

Site Location: Tacoma, Washington

Date Started/Finished: _____

Driller's Name: Alan Jensen

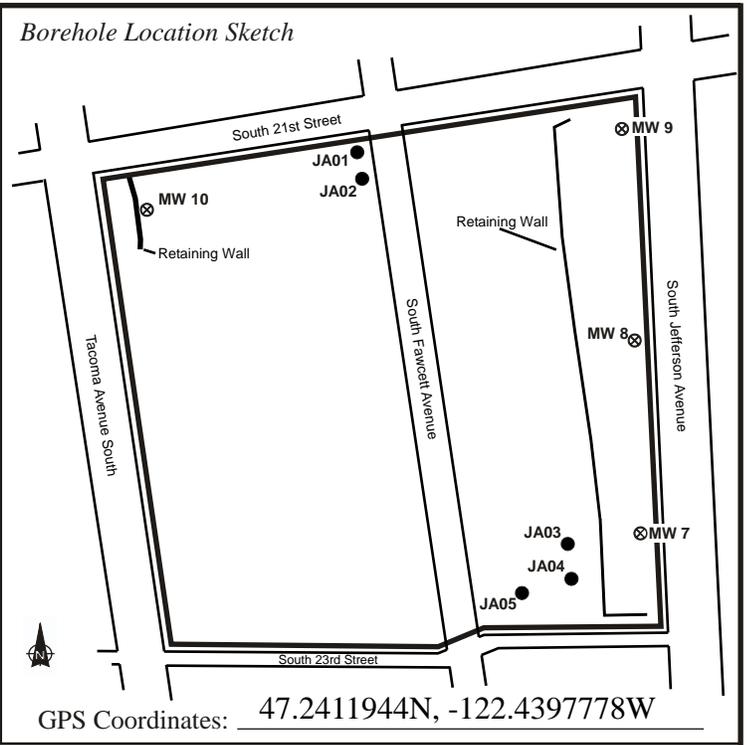
Geologist's Name: Jeff Fetters

Geologist's Signature: _____

Rig Type(s): Geoprobe

Depth to Water: Not Measured

Total Depth of Borehole: 10' bgs



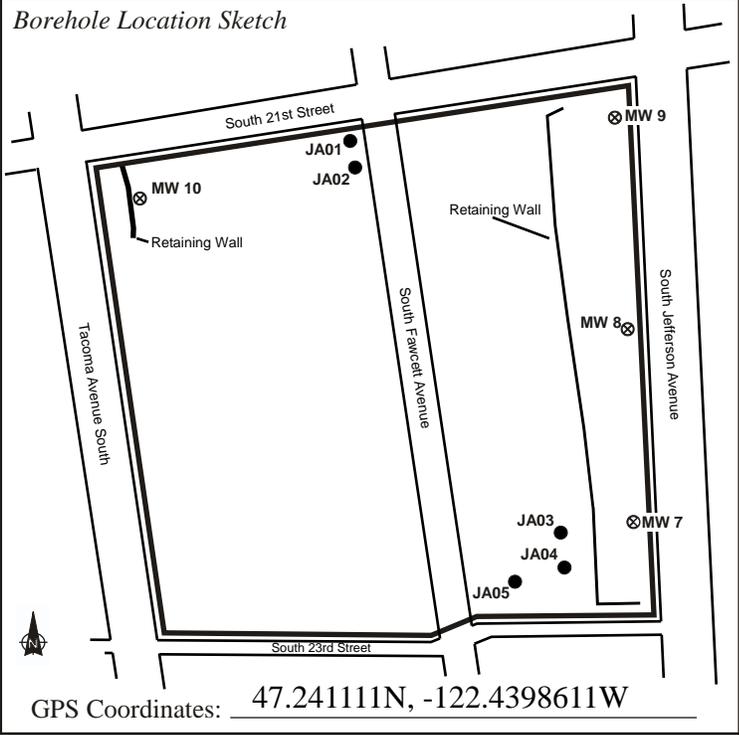
Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
1	JA04-SB04	15:45	100%		0-0.5' - SAND (SW), Medium, angular, grey.
2					0.5'-1' - SAND w/ SILT (SW-SM), medium, angular, grey.
3					1-2' - SILTY SAND (SM), dark brown, moist, organics, glass fragments noted; Sand: medium to fine, angular; Trace gravel: <1cm to 2mm, rounded.
4					2-2.5' - SAND w/ SILT (SW-SM), medium, angular, grey
5	JA04-SB08	16:05	75%		2.5-3' - SILTY SAND (SM), dark brown, moist, organics, glass fragments noted; Sand: Medium to fine, angular; Trace gravel: <1cm to 2mm, rounded.
6					3-4' - CLAYEY SAND w/ trace GRAVEL (SC), Clay: moist, light brown w/ orange mottling, trace organics; Sand: angular, fine; Gravel: 0.5cm-2mm, rounded.
7					4-8.5' - Lithology same as above.
8	JA04-SB12	15:45	100%		8.5-10' - SILTY SAND w/ GRAVEL (SM), Sand: fine, to medium, angular to sub-angular; Gravel: <0.5cm to 2mm, rounded; Silt: grayish brown, moist.
9					
10					
11					
12					Refusal at 10' bgs; TD = 10 feet bgs Borehole back filled with bentonite grout from TD to surface.

Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					



Drilling Log for JA05

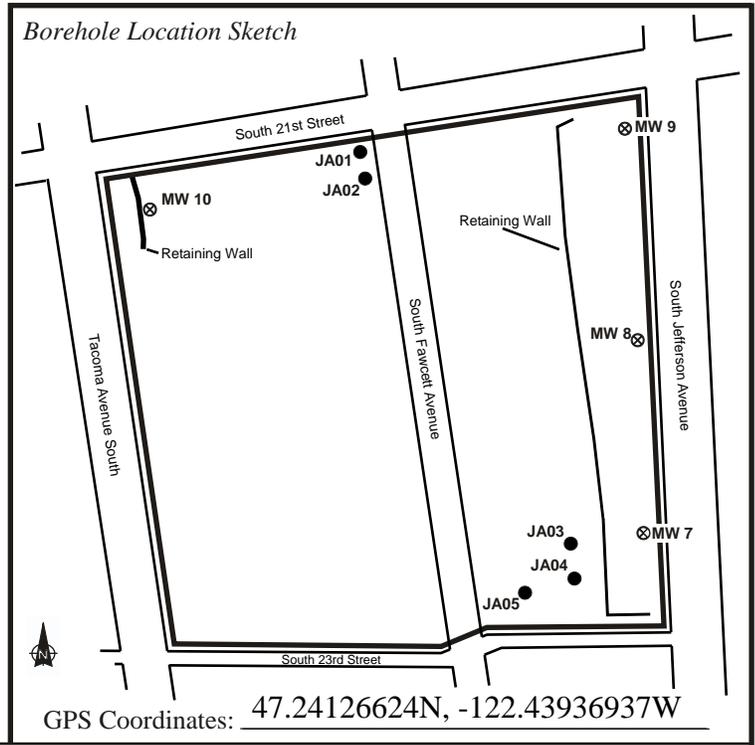
Project Name: Jefferson Avenue Site
 Site Location: Tacoma, Washington
 Date Started/Finished: 5-21-12
 Driller's Name: Alan Jensen
 Geologist's Name: Jeff Fetters
 Geologist's Signature: _____
 Rig Type(s): Geoprobe
 Depth to Water: Not Measured
 Total Depth of Borehole: 10' bgs



Depth (Feet)	Sample Number	Sample Times	Core Recovery	PID/FID Reading	Comments
1	JA05-SB04	16:50	100%		0-0.5' - SAND (SW), Medium, angular, grey.
2					0.5'-6" - SILTY SANDY GRAVEL (GM), Sand: predominantly fine, angular, Silt: moist, black; Gravel: 2.5cm to 2mm, rounded.
3					6"-1' - SILTY SANDY GRAVEL (GM), Sand: coarse to medium, angular, Silt: moist, black to dark gray; Gravel: 3cm to 2mm, rounded; brick noted.
4					1-2' - CLAYEY SAND w/ GRAVEL (SC), Sand: medium to fine, angular; Clay: dark brown to black, rust red mottling noted; Gravel: 0.5cm to 2mm, rounded.
5	JA05-SB08	17:10	75%		2-3' - CLAYEY SAND w/ GRAVEL (SC), Sand: medium to fine, angular; Clay: dark gray to black, rust red mottling noted; Gravel: 3cm to 2mm, rounded.
6					3-4' - CLAYEY SAND w/ trace GRAVEL (SC), Clay: moist, light brown w/ orange mottling, trace organics; Sand: angular, fine; Gravel: 0.5cm-2mm, rounded.
7					4-6.2' - SILTY SAND W/ GRAVEL (SM), Silt: dark brown, moist, organics, glass fragments noted; Sand: medium to fine, angular; Trace gravel: predominantly 1cm to 2mm, rounded.
8	JA05-SB12	16:30	100%		6.2-6.5' - SAND w/ GRAVEL (SW), Sand: coarse to medium, angular to sub-angular; Gravel: <0.5cm to 2mm, rounded; Silt: grayish brown, moist.
9					6.5-8' - SILTY SAND W/ GRAVEL (SM), Dark brown, moist, organics; Sand: medium to fine, angular; Trace gravel: predominantly 1cm to 2mm, rounded.
10					8-12' - SILTY SAND w/ GRAVEL (SM), Sand: fine, angular to sub-angular; Gravel: <0.5cm to 2mm, rounded; Silt: gray, moist.
11					
12					TD = 12 feet bgs Borehole back filled with bentonite grout from TD to surface.



Borehole Location Sketch



Drilling Log for _____ MW07

Project Name: _____ Jefferson Avenue Site
 Site Location: _____ Tacoma, Washington
 Date Started/Finished: _____ 5-23-2012
 Driller's Name: _____ Cascade Drilling (Curtis)
 Geologist's Name: _____ Jeff Fetters
 Geologist's Signature: _____
 Rig Type(s): _____ Hollow Stem Auger
 Depth to Water: _____ 19' bgs
 Total Depth of Borehole: _____ 23' bgs

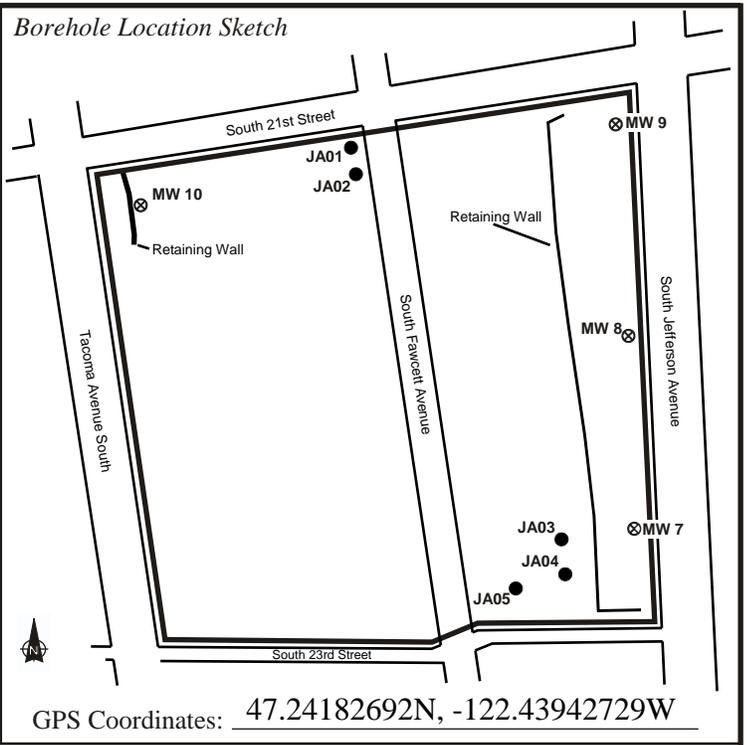
Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
1	MW07-SB04	10:15	6"-4' bgs		0-0.5' - GRAVEL (GW), 4"-minus, angular basalt (crushed/fill rock)
2					0.5'-2.5' - SILTY SANDY GRAVEL (GM), Sand: predominantly fine, angular, Silt: moist, grey; Gravel: 2.5cm to 2mm, rounded.
3					2.5'-3.25' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly fine, angular, Silt: dry, light grayish brown; Gravel: 3cm to 2mm, rounded (till).
4					3.25'-4' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly fine, angular to sub-angular, Silt: dry, light gray; Gravel: 5cm to 2mm, predominantly 0.5cm to 2mm, rounded; consolidated, well graded, clasts felsic dominated (till).
5	MW07-SB08	10:25	4'-8' bgs		4'-6.5' - Lithology same as above.
6					6.5'-8' - Lithology same as above.
7					
8	MW07-SB12	10:30	8'-12' bgs		8'-10.5' - Lithology same as above.
9					
10					10.5'-12' - Lithology same as above.
11					
12					

Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
12					12'-16' - Lithology same as above.
13					
14					
15					
16					16'-18' - Lithology same as above.
17					
18					
19					Ground water encountered at 19' bgs.
20					20'-23' - Lithology same as above.
21					
22					
23					
24					TD = 23 feet bgs
25					#10 slot well screen set from 23' bgs to 3'bgs 2/12 silica sand pack from 23' bgs to 2' bgs Bentonite chips 2' bgs to 1.5' bgs Concrete 1.5' bgs to ground surface
26					
27					
28					
29					
30					
31					
32					



Drilling Log for _____ MW08 _____

Project Name: _____ Jefferson Avenue Site _____
 Site Location: _____ Tacoma, Washington _____
 Date Started/Finished: _____ 5-23-2012 _____
 Driller's Name: _____ Cascade Drilling (Curtis) _____
 Geologist's Name: _____ Jeff Fetters _____
 Geologist's Signature: _____ _____
 Rig Type(s): _____ Hollow Stem Auger _____
 Depth to Water: _____ 10' bgs _____
 Total Depth of Borehole: _____ 13' bgs _____



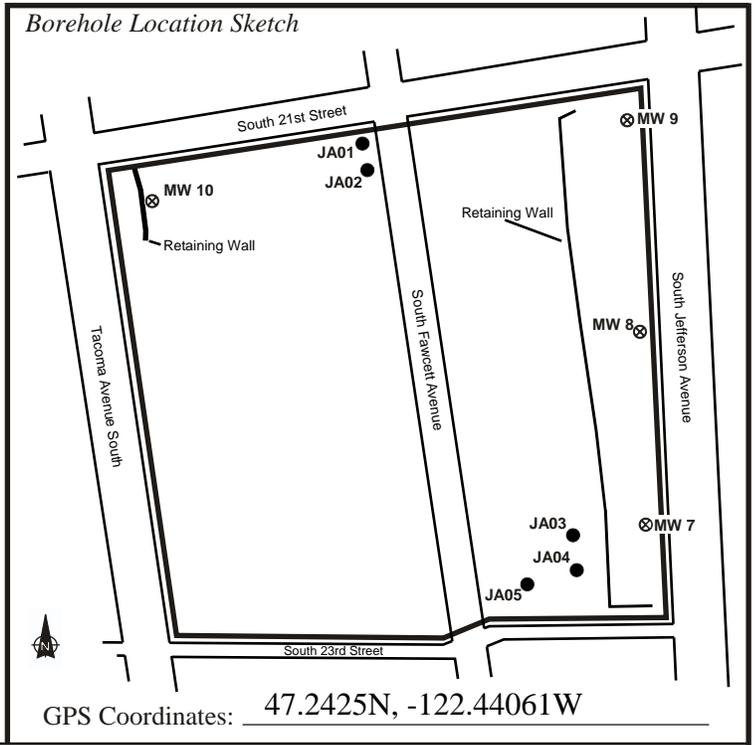
Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
1					0-0.5' - GRAVEL (GM), 4"-minus, angular basalt (crushed fill rock)
2	MW08-SB04	14:14	6"-4'bgs		0.5'-2.5' - SILTY SANDY GRAVEL (GM), Sand: predominantly fine, angular; Silt: moist, grey; Gravel: 2.5cm to 2mm, rounded.
3					2.5'-3.25' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly fine to medium, angular; Silt: dry, light grayish brown; Gravel: 3cm to 2mm, rounded; consolidated (glacial till).
4					3.25'-4' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly fine, angular to sub-angular, Silt: dry, light gray; Gravel: 5cm to 2mm, predominantly 0.5cm to 2mm, rounded; consolidated, well graded, (glacial till).
5	MW08-SB08	14:26	4'-8' bgs		4'-6.5' - Lithology same as above.
6					6.5'-8' - Lithology same as above, increased sand size 7.5-8' bgs.
7					
8					8'-10.5' - Lithology same as above.
9					
10	MW08-SB08	14:45	8'-12- bgs		Ground water encountered at 10' bgs.
11					10.5'-11' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly medium to coarse, angular, Silt: wet, light grey; Gravel: 3cm to 2mm, rounded.
12					11'-12' - Lithology same as above, sand to medium to fine.

Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
12					12'-13' - Lithology same as above.
13					
14					TD = 13 feet bgs
15					#10 slot well screen set from 13' bgs to 3'bgs
16					2/12 silica sand pack from 13' bgs to 2' bgs
17					Bentonite chips 2' bgs to 1.5' bgs
18					Concrete 1.5' bgs to ground surface
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					



Drilling Log for _____ MW09 _____

Project Name: _____ Jefferson Avenue Site _____
 Site Location: _____ Tacoma, Washington _____
 Date Started/Finished: _____ 5-24-2012 _____
 Driller's Name: _____ Cascade Drilling (Curtis) _____
 Geologist's Name: _____ Jeff Fetters _____
 Geologist's Signature: _____ _____
 Rig Type(s): _____ Hollow Stem Auger _____
 Depth to Water: _____ 10' bgs _____
 Total Depth of Borehole: _____ 13' bgs _____



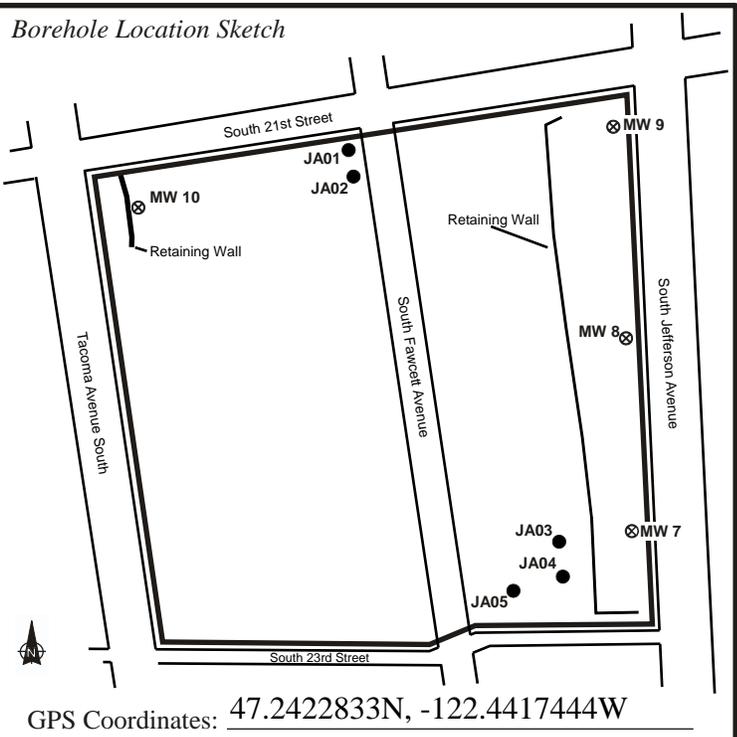
Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
1					0-0.5' - GRAVEL (GM), 4"-minus, angular basalt (crushed fill rock)
2	MW09-SB04	09:28	6" - 4' bgs		0.5'-2.5' - SILTY SANDY GRAVEL (GM), Sand: Predominantly fine, angular, Silt: moist, grey; Gravel: 2.5cm to 2mm, rounded to angular.
3					2.5'-3.25' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly fine to medium, angular, Silt: dry, light grayish brown; Gravel: 1cm to 2mm, rounded; consolidated, no reaction to HCL acid.
4					3.25'-4' - SILTY SAND w/ GRAVEL (SM), Sand: predominantly fine, angular to sub-angular, Silt: dry, light gray; Gravel: 5cm to 2mm, predominantly 0.5cm to 2mm, rounded; consolidated, well graded, clasts are felsic dominated (glacial till).
5					4'-8' - Lithology same as above.
6	MW09-SB08	09:42	4'-8' bgs		
7					
8					8'-12' - GRAVEL w/ SILT (GW-GM), Sand: Coarse to medium, angular to sub-angular, Silt: dry, light gray; Gravel: 3cm to 2mm, predominantly 0.5cm to 2mm, rounded; consolidated, well graded, clasts are felsic dominated (glacial till).
9					
10	MW09-SB012	10:15	8'-12' bgs		Ground water encountered at 10' bgs.
11					
12					

Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
12					12'-13' - Lithology same as above.
13					
14					TD = 13 feet bgs
15					#10 slot well screen set from 13' bgs to 3'bgs
16					2/12 silica sand pack from 13' bgs to 2' bgs
17					Bentonite chips 2' bgs to 1.5' bgs
18					Concrete 1.5' bgs to ground surface
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					



Drilling Log for _____ MW10 _____

Project Name: _____ Jefferson Avenue Site _____
 Site Location: _____ Tacoma, Washington _____
 Date Started/Finished: _____ 5-24-2012 _____
 Driller's Name: _____ Cascade Drilling (Curtis) _____
 Geologist's Name: _____ Jeff Fetters _____
 Geologist's Signature: _____ _____
 Rig Type(s): _____ Hollow Stem Auger _____
 Depth to Water: _____ 34' bgs _____
 Total Depth of Borehole: _____ 38' bgs _____



Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
0					0-1' - SILTY SAND w/ trace GRAVEL (SM), high organics (grass), Sand: fine, angular; Silt: dark brown, moist.
1					1'-4' - SILTY SAND w/ GRAVEL (SMG), Sand: predominantly fine, angular to sub-angular, Silt: moist, light brown; Gravel: 5cm to 2mm, predominantly 0.5cm to 2mm, rounded; consolidated, well graded, consolidated (glacial till).
2					
3					
4					4'-8' - Lithology same as above.
5					
6					
7					8'-12' - Lithology same as above.
8					
9					
10					
11					
12					

Depth (Feet)	Sample Number	Sample Times	Sample Depth	PID/FID Reading	Comments
12					12'-16' - Lithology same as above.
13					
14					
15					
16					16'-20' - Lithology same as above.
17					
18					
19					
20					20'-24' - Lithology same as above. 21' - large boulder encountered (> 1.5 foot diameter).
21					
22					
23					
24					24'-28' - Lithology same as above. 26' - Lithology same as above, increased moisture.
25					
26					
27					
28					28'-32' - Lithology same as above.
29					
30					
31					
32					

F

**National Historic Preservation Act
Correspondence**

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PROJECT REVIEW SHEET – EZ1

HISTORIC & CULTURAL RESOURCES REVIEW

PROPERTY / CLIENT NAME: Jefferson Ave Property Site, Tacoma WA

FUNDING AGENCY: US EPA

Project Applicant:	<u>Tacoma Pierce County Health Department</u>
Contact Person:	<u>Gregory M. Tanbara, Brownfield Coordinator</u>
Address:	<u>3629 South D Street, MS: 1052311</u>
City, State:	<u>Tacoma WA</u> Zip: <u>98418-6813</u> County: <u>Pierce County</u>
Phone/ FAX:	<u>253.798.4784</u>
E-Mail:	<u>gtanbara!@tpchd.org</u>

Funding Agency:

Organization:	<u>Targeted Brownfields Assessment Program U.S. EPA--Region 10 (ECL-112)</u>
Address:	<u>1200 Sixth Ave., Suite 900</u>
City, State:	<u>Seattle, WA</u> Zip: <u>98101</u>
Phone:	<u>Joanne LaBaw, Program Manager - (206) 553-2594</u>

.....

PLEASE DESCRIBE THE TYPE OF WORK TO BE COMPLETED

(Be as detailed as possible to avoid having to provide additional information)

Provide a detailed description of the proposed project:

Will conduct Phase II environmental site assessments to prepare for eventual development of the site. The Phase II assessment would included obtaining soil samples by drilling or using push probes into the soil.

Describe the existing project site conditions:

The Jefferson Avenue Property Site is a 6.4-acre site located in Tacoma WA. It is bordered on the north by South 21st Street, on the south by South 23rd Street, on the west by Tacoma Avenue South and on the east by Jefferson Avenue. There are no buildings on the site. The site was going to serve as the location for the Tacoma Police Headquarters. The land was cleared in preparation for this. These plans changed and the property has stood vacant since 2000-2002. The only structures are chain link fencing, utility poles, and some retaining walls along the west side of the lots along Jefferson Avenue.

Describe the proposed ground disturbing activities:

Phase II assessment work will involve soil boring or push probe equipment to obtain soil samples. The number and locations of the sampling activity are described in a sampling plan based on information that has been gathered on past land uses and the potential use of hazardous materials at the site. Soil borings are approximately 6 to 8 inches in diameter and customarily made to a maximum depth of 20 feet. There will be some heavy equipment excavation work undertaken to locate and remove an underground storage tank that poses a threat to health and the environment.

- Check if building(s) will be altered or demolished. If so please complete a DAHP Determination of Eligibility "EZ2" form for each building effected by the proposed project.

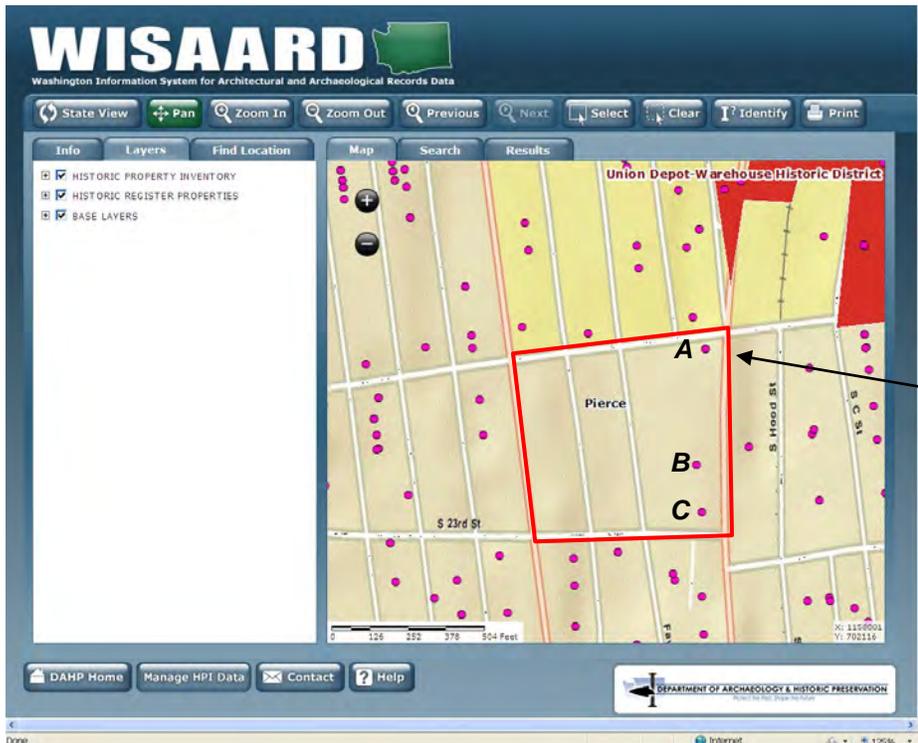
PLEASE ATTACH A COPY OF THE RELEVANT PORTION OF A 7.5 SERIES USGS QUAD MAP AND OUTLINE THE PROJECT IMPACT AREA.

USGS Quad maps are available on-line at <http://maptech.mytopo.com/onlinemaps/index.cfm>

Project Location

Township: 20 Range: 03 Section: 09
Address: Those listed below City: Tacoma County: Pierce



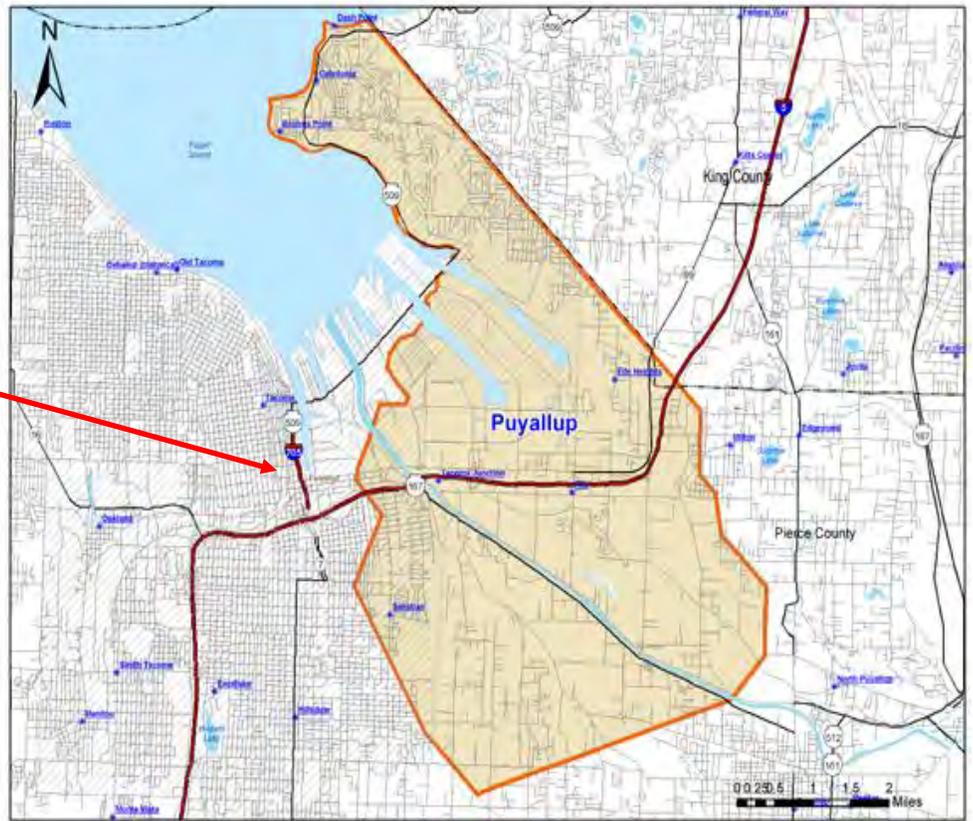


Please note:
 The Whitney Memorial Church is not in the project area. 1901 Fawcett Ave is misplaced on map. The church is not located at the intersection of South 21st and Jefferson as indicated here, but is at the intersection of South 19th Street and Fawcett. The correct location is 2 blocks north and one block west of location A. The Whitney Memorial Church is not an issue in this project.

Information from WISAARD Property Inventory

Map Site	A	B	C
Historic Name	Whitney Memorial Japanese Methodist Episcopal Church <i>(Please see note above)</i>		
Common Name	Japanese Methodist Episcopal Church		
Location Address	1901 Fawcett Ave, Tacoma, WA 98402	2132 Jefferson Ave, Tacoma, WA 98402	2148 Jefferson Ave, Tacoma, WA 98402
Tax Parcel	2019090010	2021090031	2021090060
City	Tacoma	TACOMA	TACOMA
County	Pierce	Pierce	Pierce
Resource/Listing Status	Survey/Inventory	Survey/Inventory	Survey/Inventory
Survey Name	Tacoma Sacred Places	2011 HPI Upload Project	2011 HPI Upload Project
Style	Vernacular	Unknown	Unknown
Township/Range/Section	T20R03E04	T20R03E09	T20R03E09
Field Recorder	Caroline T Swope, MSHP, PhD	Artifacts Consulting, Inc.	Artifacts Consulting, Inc.
Date Recorded	07/08/2009	08/07/2011	08/07/2011
Building Use (Current)	Religion - Religious Facility	Commerce/Trade - Business	Commerce/Trade - Business
Building Use (Historic)	Religion - Religious Facility	Unknown	Unknown
Architect	Bullard, George W.		
Year Built	1929	1967	1918
Surveyor's NR Eligibility Recommendation	No	Unable to Determine	Unable to Determine
Did the surveyor identify a potential district?	Unable to Determine	Unable to Determine	Unable to Determine
Surveyor's recommendation as a contributing property to a district?		Unable to Determine	Unable to Determine

**Jefferson Avenue
Property Site (outside
Puyallup Reservation)**



Rueben McKnight, Historic Preservation Officer for the City of Tacoma (phone: 253.591.5220), was consulted on May 8, 2012. He stated that his information indicates that there were simple residential dwellings on the northern portion of the site around South 21st and Jefferson Ave. After that, the area included some industrial activity. He stated that items discovered there might be industrial debris or perhaps some artifacts from the residential use.

Mr. McKnight recommended that the project have an Inadvertent Discovery Plan that includes provisions for work stoppage and notification of local (Mr. McKnight), state (DAHP) and Puyallup Tribe contacts.

Mail this form to:

Department of Archaeology and Historic Preservation or E-mail to:
1063 S. Capitol Way, Suite 106
P.O. Box 48343
Olympia, WA 98504-8343

Robert Whitlam, Ph.D.
State Archaeologist, DAHP
(360) 586-3080
rob.whitlam@dahp.wa.gov

(Within 30 days DAHP will mail their opinion back to you.)

Please be aware that this form may only initiate consultation. For some projects, DAHP may require additional information to complete our review such as plans, specifications, and photographs. An historic property inventory form may need to be completed by a qualified preservation professional.



STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
Mailing address: PO Box 48343 • Olympia, Washington 98504-8343
(360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

May 9, 2012

Mr. Gregory M. Tanbara
Tacoma Pierce County Health Dept.
3629 South D Street
Tacoma, Washington 98418

Re: Jefferson Avenue Site Project
Log No.: 050912-01-EPA

Dear Mr. Tanbara:

Thank you for contacting our department. We have reviewed the materials for the proposed Jefferson Avenue Site Project at Jefferson Avenue and South 23rd Street in Tacoma, Pierce County, Washington.

We concur with your finding of No Historic Properties Affected.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and the concerned tribe's cultural staff and cultural committee and this department notified

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in compliance with the Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations 36CFR800.4. Should additional information become available, our assessment may be revised. Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental documents.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360)586-3080
email: rob.whitlam@dahp.wa.gov



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Global Positioning System Coordinates

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EPA Sample Number	Station Number	CLP Inorganic Number	CLP Organic Number	Latitude	Longitude	Description
12214500	JA01SB04	MJRWM1	JRWM1	47.2425 N	-122.44061 W	
12214501	JA01SB08	MJRWM2	JRWM2	47.2425 N	-122.44061 W	
12214502	JA01SB12	MJRWM3	JRWM3	47.2425 N	-122.44061 W	
12214505	JA02SB04	MJRWM6	JRWM6	47.2424 N	-122.44076 W	Accurate to within 43 feet
12214506	JA02SB08	MJRWM7	JRWM7	47.2424 N	-122.44076 W	Accurate to within 43 feet
12214507	JA02SB12	MJRWM8	JRWM8	47.2424 N	-122.44076 W	Accurate to within 43 feet
12214510	JA03SB04		JRWN1	47.241230 N	-122.439746 W	GoogleEarth™ coordinates
12214511	JA03SB08		JRWN2	47.241230 N	-122.439746 W	GoogleEarth™ coordinates
12214512	JA03SB12		JRWN3	47.241230 N	-122.439746 W	GoogleEarth™ coordinates
12214515	JA04SB04		JRWN6	47.241173 N	-122.439736 W	GoogleEarth™ coordinates
12214516	JA04SB08		JRWN7	47.241173 N	-122.439736 W	GoogleEarth™ coordinates
12214517	JA04SB12		JRWN8	47.241173 N	-122.439736 W	GoogleEarth™ coordinates
12214520	JA05SB04		JRWP1	47.2411 N	-122.43986 W	Accurate to within 20 feet
12214521	JA05SB08		JRWP2	47.2411 N	-122.43986 W	Accurate to within 20 feet
12214522	JA05SB12		JRWP3	47.2411 N	-122.43986 W	Accurate to within 20 feet
12214534	MW07GW	MJRWQ5	JRWQ5	47.2413 N	-122.43937 W	
12214531	MW07SB04	MJRWQ2	JRWQ2	47.2413 N	-122.43937 W	
12214532	MW07SB08	MJRWQ3	JRWQ3	47.2413 N	-122.43937 W	
12214533	MW07SB12	MJRWQ4	JRWQ4	47.2413 N	-122.43937 W	
12214538	MW08GW	MJRWQ9	JRWQ9	47.241937 N	-122.439538 W	GoogleEarth™ coordinates
12214535	MW08SB04	MJRWQ6	JRWQ6	47.241937 N	-122.439538 W	GoogleEarth™ coordinates
12214536	MW08SB08	MJRWQ7	JRWQ7	47.241937 N	-122.439538 W	GoogleEarth™ coordinates
12214537	MW08SB12	MJRWQ8	JRWQ8	47.241937 N	-122.439538 W	GoogleEarth™ coordinates
12214542	MW09GW	MJRWR3	JRWR3	47.242545 N	-122.439454 W	GoogleEarth™ coordinates
12214539	MW09SB04	MJRWR0	JRWR0	47.242545 N	-122.439454 W	GoogleEarth™ coordinates
12214540	MW09SB08	MJRWR1	JRWR1	47.242545 N	-122.439454 W	GoogleEarth™ coordinates
12214541	MW09SB12	MJRWR2	JRWR2	47.242545 N	-122.439454 W	GoogleEarth™ coordinates
12274101	MW10GW	MJRWT7	JRWT7	47.2423 N	-122.44174 W	
12214554	TE06GW	MJRWT1	JRWT1	47.242537 N	-122.439517 W	GoogleEarth™ coordinates
12214550	TE06SB	MJRWS1	JRWS1	47.242537 N	-122.439517 W	GoogleEarth™ coordinates
12214551	TE09SB04	MJRWS2	JRWS2	47.2419 N	-122.43953 W	
12214552	TE09SB07	MJRWS3	JRWS3	47.2421 N	-122.43953 W	

Key:

- CLP = Contract laboratory program.
- EPA = Environmental Protection Agency.
- N = North.
- W = West.

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