2014–2015 System Operation and Remedial Action Progress

Griggs-Walnut Ground Water Plume Superfund Site

Prepared for **Las Cruces Utilities**
Las Cruces, New Mexico

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List of Acronyms and Abbreviations

µg/L	microgram(s) per liter
CLC	City of Las Cruces
COC	contaminant of concern
DAC	Doña Ana County
DACTD	Doña Ana County Transportation Department
DBS&A	Daniel B. Stephens & Associates, Inc.
DCE	dichloroethene
EPA	U.S. Environmental Protection Agency
FS	feasibility study
gpm	gallons per minute
GWP site	Griggs and Walnut Ground Water Plume Superfund Site
I-25	Interstate Highway 25
JSP	Joint Superfund Project
lb/gal	pounds per gallon
lb/hr	pounds per hour
MAO	Modified Administrative Order
MCL	maximum contaminant level
NMED	New Mexico Environment Department
NPL	National Priorities List
NPR	No Permit Required
O&M	operation and maintenance
OSE	New Mexico Office of the State Engineer
PCE	perchloroethene (also tetrachloroethene)

List of Acronyms and Abbreviations (Continued)

RAO	remedial action objective
RD	remedial design
RI	remedial investigation
ROD	record of decision
SAP	sampling and analysis plan
SCADA	supervisory control and data acquisition
SDWA	Safe Drinking Water Act
SOW	scope of work
TCE	trichloroethene
VOC	volatile organic compound

1. Introduction

The Joint Superfund Project (JSP), which consists of the City of Las Cruces (CLC) and Doña Ana County (DAC), has prepared this third annual report to summarize the progress made during the third year of operation of the groundwater remedy at the Griggs-Walnut Ground Water Plume Superfund Site (the GWP site) in Las Cruces, New Mexico. The JSP has prepared this annual report in accordance with Paragraph 29 of the Statement of Work (SOW) included as Appendix C of the Modified Administrative Order (MAO) governing remedial action at the GWP site that was issued by the U.S. Environmental Protection Agency (EPA). The JSP has been officially operating a groundwater remediation system as designed at the GWP site since September 2012, after a three-month shake-down period starting in April 2012. The GWP site is located in south-central New Mexico in the City of Las Cruces, within Doña Ana County (Figure 1); it is impacted by contaminants of concern (COCs) in groundwater beneath the site, primarily dissolved-phase perchloroethene (PCE, also known as tetrachloroethene).

As detailed in the record of decision (ROD), the remedial action objectives (RAOs) for the GWP site are as follow:

- Prevent human exposure to contaminated groundwater with PCE concentrations above the maximum contaminant level (MCL) (5 micrograms per liter [µg/L]).
- Maintain capture of the PCE-contaminated groundwater plume above the MCL (5 µg/L).
- Restore groundwater to its beneficial use as a drinking water supply with PCE concentrations no greater than the MCL (5 µg/L).

As defined in the ROD, prior to remedial action, the groundwater plume was located generally between East Griggs Avenue and East Hadley Avenue, extending east to near Interstate Highway 25 (I-25) and west to beyond North Solano Drive in the City of Las Cruces. The extent of the plume at the beginning of the remedial action is shown in Figure 2. The property uses in this area are predominantly recreational, light industrial/commercial, and residential.

The project includes pumping contaminated groundwater from existing CLC public supply wells CLC 18 and CLC 27 to a centralized treatment facility on DAC property adjacent to CLC 18, treating the water to remove the PCE and other volatile organic compounds (VOCs) that may also be present, and returning the treated groundwater to the drinking water distribution system after disinfection. The treatment facility is located immediately west of the current Doña Ana County Transportation Department (DACTD) maintenance facility. The project area also extends about 1,500 feet east of the DACTD maintenance facility to the location of well CLC 27. The project area is shown on Figure 1. This report covers the period from August 2014 through December 2015, and details the operation of the system, data collected during system operation, progress toward performance standards, and progress toward RAOs.

1.1 Background

Between 1993 and 1995, trace amounts of PCE, a chlorinated solvent commonly used as a degreaser and as a dry cleaning agent, was detected in five wells during routine sampling performed by the New Mexico Environment Department (NMED). CLC Utilities took the wells offline—specifically CLC 18 in 1996 and CLC 27 in 2000—due to PCE levels approaching the MCL of 5 µg/L detected during subsequent testing.

The GWP site was added to EPA's National Priorities List (NPL) of Superfund sites on June 14, 2001. At the time of listing, PCE had been detected at concentrations above the MCL of 5 µg/L for PCE established by the Safe Drinking Water Act (SDWA) at five CLC municipal drinking water supply wells (CLC 18, 19, 21, 24, and 27).

The remedial investigation (RI) and feasibility study (FS) were performed by CH2M Hill under contract to the EPA (CH2M Hill, 2006a and 2006b). The Proposed Plan prepared in December 2006 (U.S. EPA, 2006) and the ROD issued by EPA on June 14, 2007 (U.S. EPA, 2007) set forth the selected remedy for the GWP site, which identified groundwater pumping from existing wells and treatment at the CLC 18 site as the preferred remedy. The maximum PCE concentrations measured during sampling for the remedial design (RD) in CLC 18 and CLC 27 were 56 and 13 µg/L, respectively (Terracon, 2010).

Construction of the remedy began in September 2011. During the next six months, tanks were constructed, the building and treatment system were installed, and wells CLC 18 and CLC 27 were reconfigured to work more efficiently as extraction wells and were connected to the treatment system. A pre-final inspection was conducted on April 16, 2012 for Substantial Completion, and was attended by representatives of EPA, NMED, DBS&A, CLC, and Highland Enterprises. A punchlist of items requiring completion was developed as a result of the pre-final inspection. All items on the punchlist were relatively minor and were corrected by the Contractor to the satisfaction of the EPA, NMED, the Owner, and DBS&A. On June 13, 2012, a final inspection was completed to verify that all punchlist items were addressed, which was signed off on by representatives from EPA, NMED, DBS&A, CLC, and Highland Enterprises. A preliminary close-out report was completed and signed June 22, 2012 by EPA.

1.2 Purpose

The purpose of this report is to summarize the progress that has been made in addressing the groundwater contamination at the GWP site. Between August 2014 and December 2015, approximately 142,781,048 gallons of water containing PCE have been treated to a non-detect level and used for public water supply. Figure 3 shows the general extent of the PCE plume. John Shomaker and Associates, Inc. (JSAI) completed *Assessment of the Griggs and Walnut PCE Plume and Capture Wells* (Appendix B) in January 2016 based on the most recent groundwater monitoring event. Figures 8 and 9 of the JSAI report (Appendix B) show the general extent of the PCE plume in the upper hydrogeologic zone and the lower hydrogeologic zone, respectively. Over the course of this reporting period, approximately 16 pounds of PCE have been removed from the groundwater.

2. Site Activities

Over the past year, the groundwater extraction and treatment system has been operated continuously, except for two days of scheduled preventive maintenance on April 14 and October 29, 2015. Operation of the selected remedy has included the following tasks:

- Sampling CLC 18 and CLC 27 monthly for PCE concentration
- Sampling system raw (extracted) and finished (treated) water monthly for monitoring of PCE concentration
- Normal operation and maintenance (O&M) of the extraction wells, conveyance system, and treatment equipment
- Groundwater monitoring (results discussed in Section 2.2)

2.1 Treatment System Operation

Operation of the treatment system includes monitoring the extracted (raw) and treated (finished) groundwater for VOCs and total metals. The volume of water extracted and treated is also recorded. To ensure that air quality standards are not exceeded during the removal of VOCs via air stripping, air quality samples are also collected from the waste stream that exits the GWP site. Tables 1a and 1b summarize the analytes that are being monitored.

2.1.1 Treated Groundwater

Table 2 summarizes the sampling frequency of the remediation system sampling. Table 3 summarizes the monthly volume pumped from CLC 18 and CLC 27 as reported to the New Mexico Office of the State Engineer (OSE), as well as the PCE concentration in each well. Table 4 summarizes the concentration of PCE in the raw water as it is combined before treatment. Table 4 also provides finished water PCE concentrations and monthly totals of the treated water volume. It should be noted that the raw volume and finished volumes will not match due to time differences between readings for the OSE and supervisory control and data acquisition (SCADA) system downloads, storage, and demand.

The concentration of PCE entering the system remained relatively constant throughout the reporting period, with a minimum concentration of 12 µg/L in July 2015 and a maximum concentration of 16.7 µg/L in January 2015 (Figure 4). As shown in Figure 4, the concentration of PCE in CLC 18 exhibited wider monthly fluctuations, with a high of 31 µg/L in October 2014 and a low of 9.6 µg/L in May 2015. The PCE concentration in CLC 27 remained stable over the same reporting period at approximately 13 µg/L. Steps taken to evaluate system optimization are discussed in Section 2.3.

The treatment system is operating as designed, and is effectively removing PCE; the finished water concentration was consistently below detection limits over the reporting period (Table 4).

2.1.2 Air Emissions

All of the COCs removed from the groundwater are assumed to be released to the atmosphere. Potential air emissions from the air strippers were calculated based on the raw and finished concentrations of each contaminant. The NMED Air Quality Bureau emissions standards for a no permit required (NPR) designation are 10 pounds per hour (lb/hr) and 10 tons per year. The pounds per hour emission rate is calculated by dividing the calculated monthly mass of PCE removed in pounds by the number of hours in a month. The emission rate in tons per year was calculated by summing the calculated mass of PCE removed for the calendar year. The results of these calculations are summarized in Tables 5 and 6.

The calculated emission rate for PCE is well below limits and the NPR designation is still valid.

2.2 Groundwater Monitoring

Attainment of the RAOs is monitored through the collection of water quality samples from existing monitor wells. Table 7 lists sampling wells identified in the sampling and analysis plan (SAP) (DBS&A, 2011) and the number of samples collected during this period of operation. GWMW16 was installed in 2015, and was added to the monitoring well sample list. Wells MW-3 and MW-SF2 could not be located with a metal detector, and therefore were not sampled. Seven of the wells, MW-2, MW-4, MW-6, MWSF-1, and MWSF-3, have collapsed and can no longer be sampled. JSP staff were not able to collect a water sample from MW-5 with a bailer

or a HydraSleeve; therefore, no sample was collected. The port tubing gas feed lines 1 and 2 of GWMW08 have been damaged and were not sampled.

Table 8 lists the analyses performed on the groundwater samples. One round of sampling occurred during this reporting period in November/December 2015. Table 9 summarizes the results from the November/December 2015 sampling event. Complete analytical reports for the November/December 2015 sampling event are provided as Appendix A.

Trichloroethene (TCE) was the only PCE degradation product detected in groundwater. TCE was detected in MW-SF10 at a concentration of 1.8 µg/L and in ports 3 and 5 of well GWMW9 at concentrations of 1.2 and 1.8 µg/L, respectively. The remaining compounds detected were fuel hydrocarbons, with benzene and toluene detected in most of the wells sampled. Acetone was also identified in multiport wells GWMW01, GWMW03, GWMW08, GWMW09, and GWMW10, but not in any of the standard wells at the site. The acetone detected in these wells is thought to be related to well construction activities, and is not indicative of a contaminant release scenario.

Figure 3 shows the approximate area of PCE detections greater than 5 µg/L. Figures 8 and 9 of the JSAI report (Appendix B) show the extent of the PCE plume boundary in the upper hydrogeologic zone and the lower hydrogeologic zone, respectively, based on the most recent groundwater monitoring event. The upper and lower hydrogeologic zones are connected and act as one hydrogeologic unit east of CLC 18, where the absence of fine-grained units separating the two units is demonstrated in boring logs. Generally, the extent of the PCE plume in the upper hydrogeologic zone remains similar to the previous reporting periods; it lies between Hadley and Griggs and extends west to CLC 18 near Cottonwood and east to GWMW09 near Sheryl. The extent of the PCE plume in the lower hydrogeologic zone also remains similar to previous reporting periods. PCE in the lower hydrogeologic zone has been periodically detected at low levels in GWMW15I east of I-25. Several wells that have been used as a boundary for the west end of the plume were not sampled during this monitoring event; therefore, there is a dashed line denoting the unknown extent of the plume.

2.3 System Optimization

To determine if the system optimization performed in 2014 was successful, the results of the past three years were analyzed to determine a mass removal rate. From August 2012 through July 2013, 181,325,776 gallons of water were treated and 8.9 pounds of PCE were removed, resulting in a mass removal rate of 4.9×10^{-8} pounds per gallon (lb/gal). From August 2013 to July 2014, the total volume of water treated was 106,617,377 gallons with 10 pounds of PCE removed, resulting in a mass removal rate of 9.3×10^{-8} lb/gal. Since August 2014, 142,781,048 gallons have been treated with 16 pounds of PCE removed, resulting in a mass removal rate of 1.1×10^{-7} lb/gal. These results document the success of the system optimization, as the PCE mass removal rate continues to show improvement in PCE removal efficiency with a greater mass being removed per gallon of water treated.

2.4 Progress Toward Attaining Performance Standards

The performance standards for this project include substantive requirements, criteria, and limitations that are specified in the ROD, the MAO, the SOW, the EPA-approved final remedial design, and other EPA-approved submissions, including the remedial action work plan. The JSP has met all substantive requirements to date, including submitting all documents required by the SOW from the MAO. The JSP has consistently operated the remediation system to extract PCE-contaminated water and treat it to concentrations below the MCL.

The uranium concentrations in CLC 18 and CLC 27 are below the EPA MCL of 30 µg/L. Arsenic concentrations in wells CLC 18 and CLC 27 are below the EPA MCL of 10 µg/L. No additional treatment to remove these contaminants is required at this time.

Although PCE degradation products (i.e., TCE, cis-1,2-dichloroethene [DCE], and trans-1,2-DCE), as well as benzene, and uranium, were discussed in the ROD, the only remediation goal established was the SDWA MCL of 5 µg/L for PCE. Progress toward the remediation goal is being achieved through the removal of PCE from the groundwater by extraction and treatment (Table 4).

2.5 Progress Toward Remedial Action Objectives

As outlined in the site ROD, the RAOs for groundwater at the GWP site were established in accordance with the *Presumptive Response Strategy and Ex Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites*, and are provided as follows:

- RAO #1: Prevent human exposure to contaminated groundwater with PCE concentrations above the MCL (5 µg/L).
- RAO #2: Maintain capture of the PCE-contaminated groundwater plume above the MCL (5 µg/L).
- RAO #3: Restore groundwater to its beneficial use as a drinking water supply with PCE concentrations no greater than the MCL (5 µg/L).

To address the RAO #1, the JSP worked with the OSE to put a new well drilling moratorium in place for the area in and adjacent to the PCE plume at the GWP site. The CLC has also ceased pumping wells within the plume that are not part of the extraction system for the GWP site. These two measures, combined with treatment, are effectively addressing RAO #2. Pumping of CLC 27 and CLC 18 is meeting RAO #2 by capturing PCE-contaminated groundwater above 5 ug/L. Figure 9 of the JSAI report (Appendix B) shows the November 2015 water level elevation contours for the lower hydrogeologic zone overlaid on the November 2015 PCE concentrations in the lower hydrogeologic zone. Figure 8 of the JSAI report (Appendix B) shows the November 2015 water-level elevation contours for the upper hydrogeologic zone overlaid on the November 2015 PCE concentrations in the upper hydrogeologic zone. These figures demonstrate that the area of groundwater containing PCE concentrations above the MCL is being captured by the pumping of these two wells. Progress toward restoring groundwater to beneficial use as a drinking water supply (RAO #3) continues through removal of PCE mass from the aquifer, as shown in Table 4.

3. Conclusions

Significant progress has been made toward achieving RAOs, as follows:

- More than 430,724,201 gallons of groundwater have been extracted from the dissolved-phase plume at the GWP site.
- More than 40 pounds of PCE have been removed from the extracted groundwater.
- COCs have not been detected in the treated groundwater that has been returned to the public water supply distribution system at the Griggs Reservoir.
- Monitoring of groundwater elevations and groundwater modeling (Appendix B) indicate that the area of groundwater containing detections of PCE in both the upper and lower hydrogeologic zones is being captured by remediation wells CLC 18 and CLC 27.

References

CH2M Hill. 2006a. *Remedial investigation report, Version 1.2, Griggs and Walnut Ground Water Plume Superfund Site, Las Cruces, New Mexico*. November 2006.

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U.S. Environmental Protection Agency (U.S. EPA). 2006. *Proposed plan, Griggs and Walnut Ground Water Plume, Las Cruces, NM, Doña Ana County*. December 2006.

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Figures

Source: National Agricultural Imagery Program October 2014.

Explanation

- Monitor well
- CLC supply well
- Collapsed well
- CLC water reservoir
- Existing 10" water line to reservoir
- 6" raw water line
- 8" finished water line
- Treatment compound

GRIGGS-WALNUT GROUND WATER PLUME SITE
REMEDIAL ACTION

Project Area Map

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4/6/2016 JN ES09.0306

Figure 1

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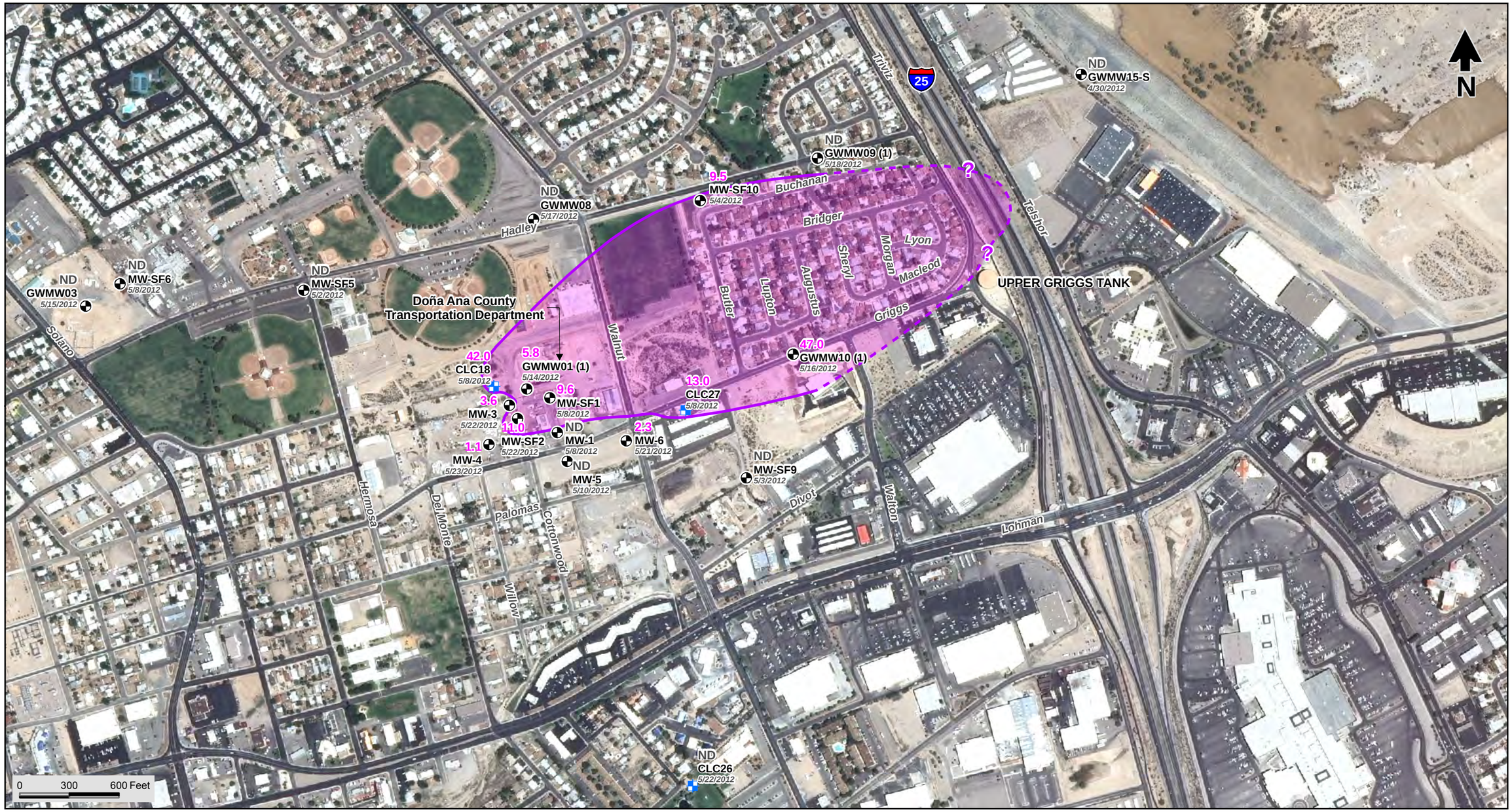

Source: National Agricultural Imagery Program
August 2009. Downloaded from RGIS.

Explanation

- Monitor well
- CLC supply well
- PCE in groundwater, May 2012 (dashed where inferred)

2.3 Concentration (µg/L)

MW-6 Well designation (port number)

5/21/2012 Sample date

Note: 1. ND = Not detected above reporting limit
2. Plume reflects PCE concentrations as expressed in wells completed across the water table and in the shallowest port in the GWMW wells (Port 1).

GRIGGS-WALNUT GROUND WATER PLUME SITE
REMEDIAL ACTION

PCE in Groundwater, May 2012

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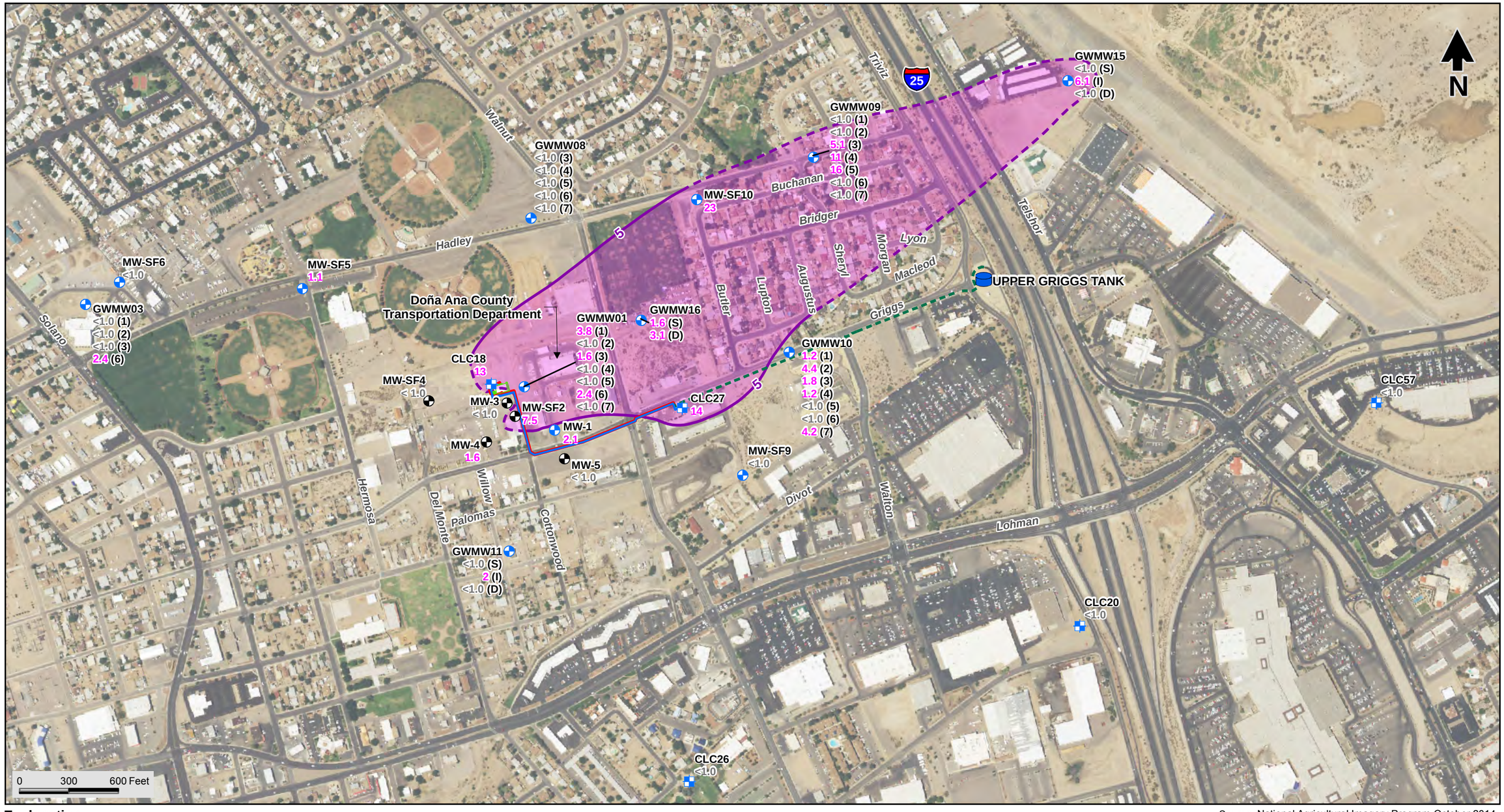
Figure 2

S:\PROJECTS\ES09.0306_GRIGGS-WALNUT\GIS\MXDS\REPORTS\2015_ANNUAL\FIG02_PCE_GW_05_2012.MXD



Source: National Agricultural Imagery Program October 2014.

Explanation

- Monitor well (Sampled 2014)
- Public supply well
- Monitor well
- Existing 10" water line to reservoir
- 6" raw water line
- 8" finished water line
- Treatment compound
- PCE concentration contour (µg/L), dashed where inferred

CLC27 Well designation

14 Concentration (µg/L)

< 1.0 Not detected above reporting limit

Notes: 1. Plume area takes into account contamination from deeper depths.
2. Wells in black were not sampled in 2015. Data shown is from the 2014 sampling event.

GRIGGS-WALNUT GROUND WATER PLUME SITE
REMEDIAL ACTION

PCE in Groundwater, 2015

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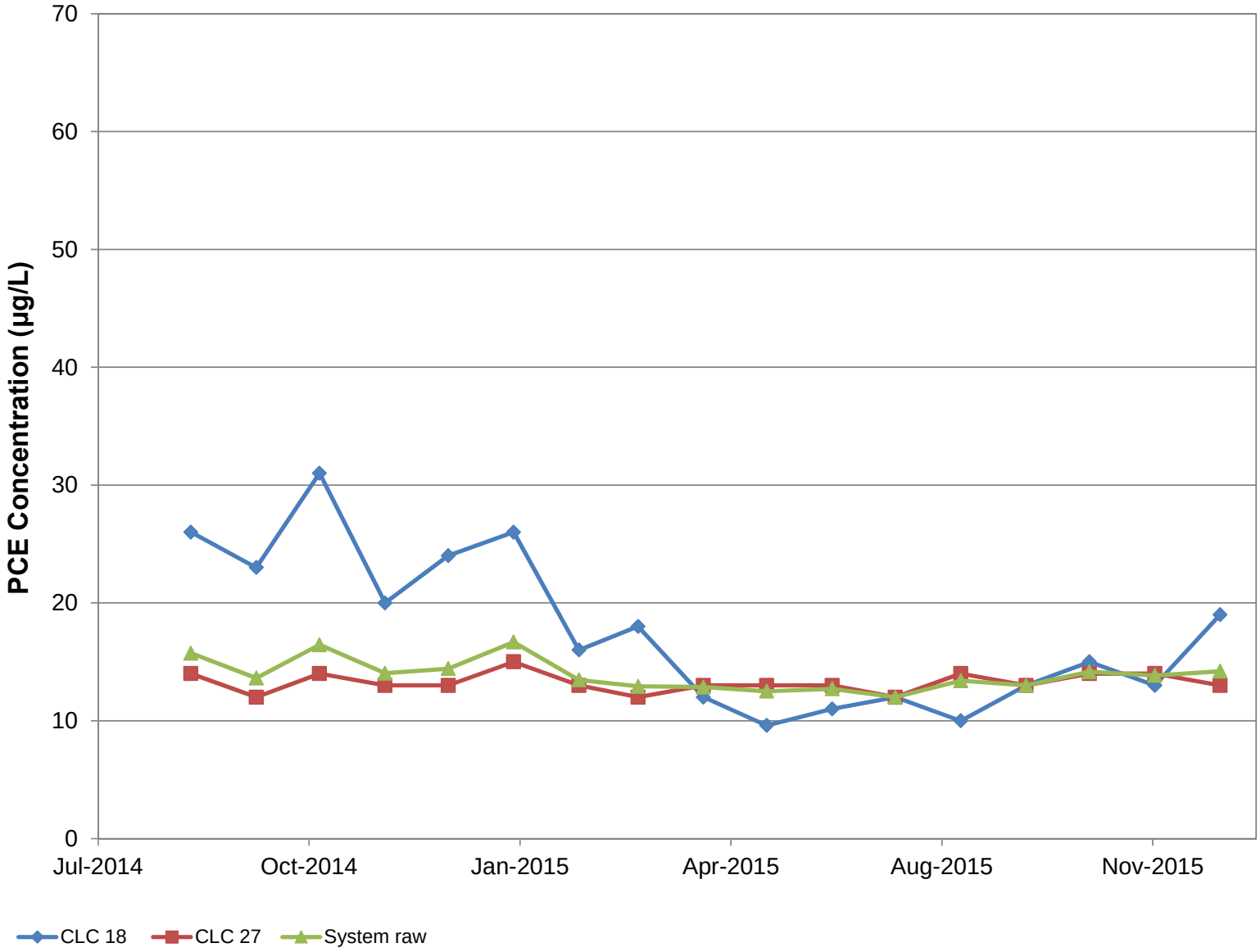
2/23/2016
JN ES13.0251

Figure 3

S:\PROJECTS\ES09.0306_GRIGGS-WALNUT\GIS\MXDS\REPORTS\2015_ANNUAL\FIG03_PCE_GW_05_2015_ALL_PORTS.MXD



GRIGGS-WALNUT GROUND WATER PLUME SITE
REMEDIAL ACTION

PCE Concentrations Over Reporting Period

Figure 4

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2/12/16

Tables

Table 1a. Air Analytical Method and NMED Air Quality No Permit Required Emissions Standards

Emission	Analytical Method	Maximum Rate	
		lb/hr	ton/yr
Air	8260B	10	10

lb/hr = Pounds per hour
ton/yr = Tons per year

Table 1b. Groundwater Analytical Methodologies and Screening Levels

Analyte Class	Analytical Method	Concentration (µg/L)		
		Method Detection Limit [a]	EPA MCL	NMWQCC Standard
PCE	8260B	0.39	5	20
TCE	8260B	0.24	5	100
DCE	8260B	0.27	5	10
Vinyl chloride	8260B	0.4	2	1
Arsenic	6020, ICPMS	0.07	10	100
Arsenic speciation	SM 3114B Mod.	2	10	100
Uranium	6020, ICPMS	0.011	30	30

[a] Method detection limit does not imply reporting limit.

µg/L = Micrograms per liter
EPA = U.S. Environmental Protection Agency
MCL = Maximum contaminant level
NMWQCC = New Mexico Water Quality Control Commission
PCE = Perchloroethene
TCE = Trichloroethene
DCE = Dichloroethene
ICPMS = Inductively coupled plasma mass spectrometry

Table 2. Remediation System Sampling Frequency

Sample Location	Sample Matrix	Sample Point	Sample Method	Sample Analyses	Startup Sample Collection Schedule [a]	Normal Operation Sampling and Monitoring Schedule
Pump P-1 raw	Groundwater	IS1	Grab	EPA 8260B for VOCs, field temperature, pH, and conductivity	Sample after first hour of operation of pump P-1. Every other day for first 6 days of operation.	Sample once per week for weeks 2 through 8. Thereafter, sample once per month or as directed.
C-1 finished	Groundwater	C1	Grab	EPA 8260B for VOCs, field temperature, pH, and conductivity	Sample after first 2 hours of operation of pump P-1. Once per day for days 2 through 6 of system operation.	Sample once per week for weeks 2 through 8. Thereafter, sample once per month or as directed.
C-2 finished	Groundwater	C2	Grab	EPA 8260B for VOCs, field temperature, pH, and conductivity	Sample after first 2 hours of operation of pump P-1. Once per day for days 2 through 6 of system operation.	Sample once per week for weeks 2 through 8. Thereafter, sample once per month or as directed.
Finished downstream of chlorine disinfection	Groundwater	ES1	Grab	EPA 8260B for VOCs, field temperature, pH, and conductivity	Sample after first 2 hours of operation of pump P-1. Once per day for days 2 through 6 of system operation.	Sample once per week for weeks 2 through 8. Thereafter, sample once per month or as directed.
C-1 air stripper emissions	Air	AS1	Grab	EPA 8260B for VOCs	Sample once per day for the first 3 days and once per week during remaining startup.	Sample once per week for weeks 2 through 4. Thereafter, sample once per month or as directed.
C-2 air stripper emissions	Air	AS2	Grab	EPA 8260B for VOCs	Sample once per day for the first 3 days and once per week during remaining startup.	Sample once per week for weeks 2 through 4. Thereafter, sample once per month or as directed.

[a] Plant will remain offline until startup is completed and normal operation is verified. A minimum of 4 weeks shakedown and startup will be accomplished prior to bringing system online.
VOCs = Volatile organic compounds

Table 3. Volume of Water Extracted and PCE Concentrations, CLC 18 and CLC 27
August 2014 through December 2015

Month	CLC 18		CLC 27	
	Groundwater Extracted (gallons)	Raw PCE Concentration (µg/L)	Groundwater Extracted (gallons)	Raw PCE Concentration (µg/L)
Aug 2014	1,212,566	26	7,181,546	14
Sep 2014	1,251,988	23	7,238,835	12
Oct 2014	1,265,959	31	7,525,461	14
Nov 2014	1,253,584	20	7,224,424	13
Dec 2014	1,030,947	24	6,927,999	13
Jan 2015	1,306,250	26	7,283,743	15
Feb 2015	1,161,533	16	6,344,619	13
Mar 2015	1,302,121	18	7,201,802	12
Apr 2015	1,206,651	12	6,996,342	13
May 2015	1,256,285	9.6	7,361,470	13
Jun 2015	1,249,710	11	7,171,991	13
Jul 2015	1,295,689	12	7,306,334	12
Aug 2015	1,263,541	10	7,082,150	14
Sep 2015	1,267,054	13	7,183,161	13
Oct 2015	1,269,969	15	7,172,654	14
Nov 2015	1,276,069	13	7,018,465	14
Dec 2015	1,737,004	19	6,953,132	13
Total	21,606,920		121,174,128	

PCE = Perchloroethene
µg/L = Micrograms per liter

Table 4. Mass of PCE Removed from Groundwater
August 2014 through December 2015

Month	PCE Concentration (µg/L)		Volume Treated (gallons)	Mass of PCE Removed (pounds)
	Raw	Finished		
Aug 2014	15.7	ND	8,394,112	1.1
Sep 2014	13.6	ND	8,490,823	0.9
Oct 2014	16.4	ND	8,791,420	1.2
Nov 2014	14.0	ND	8,478,008	1.0
Dec 2014	14.4	ND	7,958,946	0.9
Jan 2015	16.7	ND	8,589,993	1.2
Feb 2015	13.5	ND	7,506,152	0.8
Mar 2015	12.9	ND	8,503,923	0.9
Apr 2015	12.9	ND	8,202,993	0.8
May 2015	12.5	ND	8,617,755	0.9
Jun 2015	12.7	ND	8,421,701	0.9
Jul 2015	12.0	ND	8,602,023	0.8
Aug 2015	13.4	ND	8,345,691	0.9
Sep 2015	13.0	ND	8,450,215	0.9
Oct 2015	14.2	ND	8,442,623	1.0
Nov 2015	13.8	ND	8,294,534	0.9
Dec 2015	14.2	ND	8,690,136	1.0
Total			142,781,048	16.0

Note: For the purposes of mass removal calculations, non-detect results were assumed to be equal to half of the laboratory detection limit.
PCE = Perchloroethene
µg/L = Micrograms per liter
ND = Not detected

Table 5. Calculated Air Emissions Based on Measured Raw and Finished Concentrations

Month	Calculated PCE Air Emissions (lb/hr)
Aug 2014	0.001
Sep 2014	0.001
Oct 2014	0.002
Nov 2014	0.001
Dec 2014	0.001
Jan 2015	0.002
Feb 2015	0.001
Mar 2015	0.001
Apr 2015	0.001
May 2015	0.001
Jun 2015	0.001
Jul 2015	0.001
Aug 2015	0.001
Sep 2015	0.001
Oct 2015	0.001
Nov 2015	0.001
Dec 2015	0.001

Note: For a conservative calculation, it is assumed that all mass removed (Table 4) is discharged to air.
lb/hr = Pounds per hour
PCE = Perchloroethene

Table 6. Calculated Air Emissions by Year Based on Measured Raw and Finished Concentrations

Contaminant of Concern	Calculated Air Emissions (tons/year)		
	2013	2014	2015
PCE	4.76×10^{-3}	5.93×10^{-3}	5.45×10^{-3}

Table 7. Wells Included in the Groundwater Monitoring Program

Sample Location	No. of Samples
CLC 18	1
CLC 20	1
CLC 26	1
CLC 27	1
CLC 57	1
CLC Paz Park Well	1
GWMW01	7
GWMW03	4
GWMW08 [e]	5
GWMW09	7
GWMW10	7
GWMW11-S	1
GWMW11-I	1
GWMW11-D	1
GWMW15-S	1
GWMW15-I	1
GWMW15-D	1

Sample Location	No. of Samples
GWMW16-S	1
GWMW16-D	1
MW-1	1
MW-2	— [a]
MW-3	— [b]
MW-4	— [c]
MW-5	— [c]
MW-6	— [d]
MW-SF1	— [f]
MW-SF2	— [g]
MW-SF3	— [h]
MW-SF4	— [i]
MW-SF5	1
MW-SF6	1
MW-SF9	1
MW-SF10	1

Note: The large number of samples from GWMW01 through GWMW10 reflects the number of sample ports at those wells.

[a] Blocked 18 inches down; no static water level measured.

[b] Unable to locate with metal detector.

[c] Unable to sample with bailer or Hydrasleeve; blocked at 186.2 feet.

[d] Pipe visibly busted (12/17/2013). No access; water at 72.5 feet (full mud).

[e] Ports 1 and 2 not sampled due to N_2 leaks.

[f] Blocked (12/20/2013). No access; water at 59.9 feet (full of mud).

[g] Unable to locate; well covered and exposed to motor oil.

[h] Pipe busted (12/20/2013). No access; water at 72.5 feet (full mud).

[i] Well plugged.

Table 8. List of Analytes Reported in 8260 Analysis of Groundwater Samples

Analyte	Units
1,1,1,2-Tetrachloroethane	µg/L
1,1,1-Trichloroethane	µg/L
1,1,2,2-Tetrachloroethane	µg/L
1,1,2-Trichloroethane	µg/L
1,1-Dichloroethane	µg/L
1,1-Dichloroethene	µg/L
1,1-Dichloropropene	µg/L
1,2,3-Trichlorobenzene	µg/L
1,2,3-Trichloropropane	µg/L
1,2,4-Trichlorobenzene	µg/L
1,2,4-Trimethylbenzene	µg/L
1,2-Dibromo-3-chloropropane	µg/L
1,2-Dibromoethane (EDB)	µg/L
1,2-Dichlorobenzene	µg/L
1,2-Dichloroethane (EDC)	µg/L
1,2-Dichloropropane	µg/L
1,3,5-Trimethylbenzene	µg/L
1,3-Dichlorobenzene	µg/L
1,3-Dichloropropane	µg/L
1,4-Dichlorobenzene	µg/L
1-Methylnaphthalene	µg/L
2,2-Dichloropropane	µg/L
2-Butanone	µg/L
2-Chlorotoluene	µg/L
2-Hexanone	µg/L
2-Methylnaphthalene	µg/L
4-Chlorotoluene	µg/L
4-Isopropyltoluene	µg/L
4-Methyl-2-pentanone	µg/L
Acetone	µg/L
Arsenic	mg/L
Benzene	µg/L
Bromobenzene	µg/L
Bromodichloromethane	µg/L
Bromoform	µg/L

Analyte	Units
Bromomethane	µg/L
Carbon disulfide	µg/L
Carbon tetrachloride	µg/L
Chlorobenzene	µg/L
Chloroethane	µg/L
Chloroform	µg/L
Chloromethane	µg/L
cis-1,2-DCE	µg/L
cis-1,3-Dichloropropene	µg/L
Dibromochloromethane	µg/L
Dibromomethane	µg/L
Dichlorodifluoromethane	µg/L
Ethylbenzene	µg/L
Hexachlorobutadiene	µg/L
Isopropylbenzene	µg/L
Methyl tert-butyl ether (MTBE)	µg/L
Methylene chloride	µg/L
Naphthalene	µg/L
n-Butylbenzene	µg/L
n-Propylbenzene	µg/L
sec-Butylbenzene	µg/L
Styrene	µg/L
tert-Butylbenzene	µg/L
Tetrachloroethene (PCE)	µg/L
Toluene	µg/L
trans-1,2-DCE	µg/L
trans-1,3-Dichloropropene	µg/L
Trichloroethene (TCE)	µg/L
Trichlorofluoromethane	µg/L
Uranium	mg/L
Vinyl chloride	µg/L
Xylenes, total	µg/L
pH	s.u.
Temperature	°C
Electrical conductivity	µmhos/cm

Table 9. Analyte Detections, November/December 2015
Page 1 of 2

Sample ID	Concentration (µg/L)														
	1,2,4-TMB	2-Methyl Naphthalene	Acetone	Benzene	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Isopropyl-benzene	MEK	MTBE	Naphthalene	n-Propyl-benzene	PCE	Toluene	TCE
CLC Well 18	—	—	—	—	—	—	—	—	—	—	—	—	13	—	—
CLC Well 18 Dup	—	—	—	—	—	—	—	—	—	—	—	—	13	—	—
CLC Well 20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLC Well 26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLC Well 27	—	—	—	—	—	—	—	—	—	—	—	—	14	—	—
CLC Well 27 Dup	—	—	—	—	—	—	—	—	—	—	—	—	14	—	—
CLC Well 57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CLC Paz Park Well	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-1	—	—	—	—	—	—	—	—	—	—	—	—	2.1	—	—
MW-SF5	—	—	—	—	—	—	—	—	—	—	—	—	1.1	—	—
MW-SF6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-SF9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-SF10	—	—	—	—	—	—	—	—	—	—	—	—	23	—	1.8
GWMW-01 (1)	—	—	16	—	—	—	—	—	—	—	—	—	3.8	1.9	—
GWMW-01 (2)	—	—	16	—	—	—	—	—	—	—	—	—	—	4.5	—
GWMW-01 (3)	—	—	—	1.6	—	—	—	—	—	—	—	—	1.6	5.6	—
GWMW-01 (4)	—	—	1.2	1.2	—	—	—	—	—	—	—	—	—	3.4	—
GWMW-01 (5)	—	—	—	—	—	—	—	—	—	—	—	—	—	3.8	—
GWMW-01 (6)	—	—	—	—	—	—	—	—	—	—	—	—	2.4	2.8	—
GWMW-01 (7)	—	—	—	1.5	—	—	—	—	—	—	—	—	—	4	—
GWMW-03 (1)	—	—	—	—	—	—	—	—	—	—	—	—	—	4.2	—
GWMW-03 (2)	—	—	21	2.1	—	—	—	—	17	—	—	—	—	24	—
GWMW-03 (3)	—	—	15	1.3	—	—	—	—	98	—	—	—	—	16	—
GWMW-03 (6)	—	—	20	2.3	—	—	—	—	—	—	—	—	—	25	—
GWMW-08 (3)	—	—	—	—	—	—	—	—	—	—	—	—	—	5.2	—
GWMW-08 (4)	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	—
GWMW-08 (5)	—	—	—	—	—	—	—	—	—	—	—	—	—	5.2	—
GWMW-08 (6)	—	—	—	—	—	—	—	—	—	—	—	—	—	5.8	—
GWMW-08 (7)	—	—	20	1.7	—	—	—	—	—	—	—	—	—	7.5	—
GWMW-09 (1)	—	—	—	—	—	—	—	—	—	—	—	—	—	17	—
GWMW-09 (2)	—	—	—	5.5	—	—	—	—	—	—	—	—	—	100	—
GWMW-09 (3)	—	—	16	4.4	—	—	—	—	26	—	—	—	5.1	81	1.2

µg/L = Micrograms per liter
TMB = Trimethylbenzene
DCE = Dichloroethene
MEK = Methyl ethyl ketone
MTBE = Methyl tertiary-butyl ether
PCE = Perchloroethene
TCE = Trichloroethene
— = Not detected above laboratory reporting limit

Table 9. Analyte Detections, November/December 2015
Page 2 of 2

Sample ID	Concentration (µg/L)														
	1,2,4-TMB	2-Methyl Naphthalene	Acetone	Benzene	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Isopropyl-benzene	MEK	MTBE	Naphthalene	n-Propyl-benzene	PCE	Toluene	TCE
GWMW-09 (4)	—	—	—	2.2	—	—	—	—	—	—	—	—	11	62	—
GWMW-09 (5)	—	—	—	2.5	—	—	—	—	—	—	—	—	16	64	1.8
GWMW-09 (6)	—	—	40	5.2	—	—	—	—	33	—	—	—	—	100	—
GWMW-09 (7)	—	—	16	4.7	—	—	—	—	11	—	—	—	—	81	—
GWMW-10 (1)	—	—	—	—	—	—	—	—	—	—	—	—	1.2	—	—
GWMW-10 (2)	—	—	37	—	—	—	—	—	—	—	—	—	4.4	4	—
GWMW-10 (3)	—	—	—	—	—	—	—	—	—	—	—	—	1.8	—	—
GWMW-10 (4)	—	—	37	1.1	—	—	—	—	—	—	—	—	1.2	7.4	—
GWMW-10 (5)	—	—	17	—	—	—	—	—	—	—	—	—	—	2.7	—
GWMW-10 (6)	—	—	13	—	—	—	—	—	—	—	—	—	—	12	—
GWMW-10 (7)	—	—	—	—	—	—	—	—	—	—	—	—	4.2	2.5	—
GWMW-11-S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GWMW-11-S Dup	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GWMW-11-I	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
GWMW-11-D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GWMW-15-S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GWMW-15-I	—	—	—	—	—	—	—	—	—	—	—	—	6.1	—	—
GWMW-15-D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GWMW-16-S	—	—	—	—	—	—	—	—	—	—	—	—	1.6	—	—
GWMW-16-D	—	—	—	—	—	—	—	—	—	—	—	—	3.1	—	—

µg/L = Micrograms per liter
TMB = Trimethylbenzene
DCE = Dichloroethene
MEK = Methyl ethyl ketone
MTBE = Methyl tertiary-butyl ether
PCE = Perchloroethene
TCE = Trichloroethene
— = Not detected above laboratory reporting limit

Table 10. PCE Concentrations in Groundwater

Well	PCE Concentration (µg/L)			
	2012	2013	2014	2015
CLC Paz Park Well	<1	<1	<1	<1
CLC 18	56	2.7	6	13
CLC 20	NS	<1	<1	<1
CLC 26	<1	<1	<1	<1
CLC 27	13	14	11	14
CLC 57	NS	<1	<1	<1
GWMW01-01	5.8	11	1.3	3.8
GWMW01-02	<1	<1	<1	<1
GWMW01-03	2.7	3.2	2	1.6
GWMW01-04	<1	<1	<1	<1
GWMW01-05	3.2	<1	<1	<1
GWMW01-06	11	14	8	2.4
GWMW01-07	3.2	3.6	2.3	<1
GWMW03-01	<1	<1	<1	<1
GWMW03-02	<1	<1	<1	<1
GWMW03-03	<1	<1	<1	<1
GWMW03-04	NS	<1	<1	NS
GWMW03-05	<1	<1	<1	NS
GWMW03-06	<1	<1	<1	<1
GWMW08-03	<1	<1	<1	<1
GWMW08-04	<1	<1	<1	<1
GWMW08-05	<1	<1	<1	<1
GWMW08-06	<1	<1	<1	<1
GWMW08-07	<1	<1	<1	<1
GWMW09-01	<1	<10	<1	<1
GWMW09-02	1.3	<20	<1	<1
GWMW09-03	<1	<10	1	5.1
GWMW09-04	1.2	<1	7.9	11
GWMW09-05	1.7	<10	1.5	16
GWMW09-06	<1	<10	<1	<1
GWMW09-07	<1	<10	<1	<1
GWMW10-01	47	<1	26	1.2
GWMW10-02	14	7.1	11	4.4
GWMW10-03	45	42	25	1.8

PCE = Perchloroethene
µg/L = Micrograms per liter
NS = Not sampled

Table 10. PCE Concentrations in Groundwater

Well	PCE Concentration (µg/L)			
	2012	2013	2014	2015
GWMW10-04	4.5	3.7	1.3	1.2
GWMW10-05	<1	<1	<1	<1
GWMW10-06	<1	<1	<1	<1
GWMW10-07	<1	<1	<1	4.2
GWMW11-D	<1	<1	<1	<1
GWMW11-I	<1	<1	<1	2
GWMW11-S	<1	<1	<1	<1
GWMW15-D	<1	<1	<1	<1
GWMW15-I	2.3	<1	1.1	6.1
GWMW15-S	<1	<1	<1	<1
GWMW16-S	NS	NS	NS	1.6
GWMW16-D	NS	NS	NS	3.1
MW-1	<10	<5	<1	2.1
MW-3	3.6	2.4	<1	NS
MW-4	1.1	4.2	1.6	NS
MW-5	<1	<1	<1	NS
MW-6	2.3	NS	NS	NS
MW-SF1	9.6	NS	NS	NS
MW-SF10	9.5	12	NS	23
MW-SF2	11	7.5	NS	NS
MW-SF4	NS	NS	<1	NS
MW-SF5	<1	<1	<1	1.1
MW-SF6	<1	<1	<1	<1
MW-SF9	<1	<1	<1	<1

PCE = Perchloroethene
µg/L = Micrograms per liter
NS = Not sampled

Appendix A

Laboratory Reports

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 15, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX (575) 528-3513

RE: Griggs-Walnut Superfund Process Center Monthly Analysis OrderNo.: 1408383

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/8/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1408383**
Date Reported: **8/15/2014**

CLIENT: City of Las Cruces
Client Sample ID: AS1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 10:13:00 AM
Lab ID: 1408383-001
Matrix: AIR
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Toluene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Ethylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Naphthalene	ND	0.20		µg/L	1	8/14/2014 11:04:29 AM	R20590
1-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2014 11:04:29 AM	R20590
2-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2014 11:04:29 AM	R20590
Acetone	ND	1.0		µg/L	1	8/14/2014 11:04:29 AM	R20590
Bromobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Bromodichloromethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Bromoform	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Bromomethane	ND	0.20		µg/L	1	8/14/2014 11:04:29 AM	R20590
2-Butanone	ND	1.0		µg/L	1	8/14/2014 11:04:29 AM	R20590
Carbon disulfide	ND	1.0		µg/L	1	8/14/2014 11:04:29 AM	R20590
Carbon tetrachloride	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Chlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Chloroethane	ND	0.20		µg/L	1	8/14/2014 11:04:29 AM	R20590
Chloroform	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Chloromethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
2-Chlorotoluene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
4-Chlorotoluene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
cis-1,2-DCE	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	8/14/2014 11:04:29 AM	R20590
Dibromochloromethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Dibromomethane	ND	0.20		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,3-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,4-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Dichlorodifluoromethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,1-Dichloroethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,1-Dichloroethene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,3-Dichloropropane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
2,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 10:13:00 AM
Lab ID: 1408383-001
Matrix: AIR
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Hexachlorobutadiene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
2-Hexanone	ND	1.0		µg/L	1	8/14/2014 11:04:29 AM	R20590
Isopropylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
4-Isopropyltoluene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
4-Methyl-2-pentanone	ND	1.0		µg/L	1	8/14/2014 11:04:29 AM	R20590
Methylene chloride	ND	0.30		µg/L	1	8/14/2014 11:04:29 AM	R20590
n-Butylbenzene	ND	0.30		µg/L	1	8/14/2014 11:04:29 AM	R20590
n-Propylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
sec-Butylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Styrene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
tert-Butylbenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Tetrachloroethene (PCE)	0.26	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
trans-1,2-DCE	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,1,1-Trichloroethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,1,2-Trichloroethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Trichloroethene (TCE)	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Trichlorofluoromethane	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
1,2,3-Trichloropropane	ND	0.20		µg/L	1	8/14/2014 11:04:29 AM	R20590
Vinyl chloride	ND	0.10		µg/L	1	8/14/2014 11:04:29 AM	R20590
Xylenes, Total	ND	0.15		µg/L	1	8/14/2014 11:04:29 AM	R20590
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	8/14/2014 11:04:29 AM	R20590
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	8/14/2014 11:04:29 AM	R20590
Surr: Toluene-d8	91.8	70-130		%REC	1	8/14/2014 11:04:29 AM	R20590
Surr: 4-Bromofluorobenzene	88.2	70-130		%REC	1	8/14/2014 11:04:29 AM	R20590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 10:15:00 AM
Lab ID: 1408383-002
Matrix: AIR
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Toluene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Ethylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Naphthalene	ND	0.20		µg/L	1	8/14/2014 11:32:27 AM	R20590
1-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2014 11:32:27 AM	R20590
2-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2014 11:32:27 AM	R20590
Acetone	ND	1.0		µg/L	1	8/14/2014 11:32:27 AM	R20590
Bromobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Bromodichloromethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Bromoform	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Bromomethane	ND	0.20		µg/L	1	8/14/2014 11:32:27 AM	R20590
2-Butanone	ND	1.0		µg/L	1	8/14/2014 11:32:27 AM	R20590
Carbon disulfide	ND	1.0		µg/L	1	8/14/2014 11:32:27 AM	R20590
Carbon tetrachloride	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Chlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Chloroethane	ND	0.20		µg/L	1	8/14/2014 11:32:27 AM	R20590
Chloroform	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Chloromethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
2-Chlorotoluene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
4-Chlorotoluene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
cis-1,2-DCE	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	8/14/2014 11:32:27 AM	R20590
Dibromochloromethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Dibromomethane	ND	0.20		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,3-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,4-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Dichlorodifluoromethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,1-Dichloroethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,1-Dichloroethene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,3-Dichloropropane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
2,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 10:15:00 AM
Lab ID: 1408383-002
Matrix: AIR
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Hexachlorobutadiene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
2-Hexanone	ND	1.0		µg/L	1	8/14/2014 11:32:27 AM	R20590
Isopropylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
4-Isopropyltoluene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
4-Methyl-2-pentanone	ND	1.0		µg/L	1	8/14/2014 11:32:27 AM	R20590
Methylene chloride	ND	0.30		µg/L	1	8/14/2014 11:32:27 AM	R20590
n-Butylbenzene	ND	0.30		µg/L	1	8/14/2014 11:32:27 AM	R20590
n-Propylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
sec-Butylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Styrene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
tert-Butylbenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Tetrachloroethene (PCE)	0.25	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
trans-1,2-DCE	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,1,1-Trichloroethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,1,2-Trichloroethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Trichloroethene (TCE)	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Trichlorofluoromethane	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
1,2,3-Trichloropropane	ND	0.20		µg/L	1	8/14/2014 11:32:27 AM	R20590
Vinyl chloride	ND	0.10		µg/L	1	8/14/2014 11:32:27 AM	R20590
Xylenes, Total	ND	0.15		µg/L	1	8/14/2014 11:32:27 AM	R20590
Surr: Dibromofluoromethane	99.0	70-130		%REC	1	8/14/2014 11:32:27 AM	R20590
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	1	8/14/2014 11:32:27 AM	R20590
Surr: Toluene-d8	93.0	70-130		%REC	1	8/14/2014 11:32:27 AM	R20590
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	8/14/2014 11:32:27 AM	R20590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1408383**
15-Aug-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Process Center Month

Sample ID **1408383-001a DUP** SampType: **DUP** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **AS1_140807** Batch ID: **R20590** RunNo: **20590**
Prep Date: Analysis Date: **8/14/2014** SeqNo: **599052** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.10						0	20	
Toluene	ND	0.10						0	20	
Ethylbenzene	ND	0.10						0	22.4	
Methyl tert-butyl ether (MTBE)	ND	0.10						0	20	
1,2,4-Trimethylbenzene	ND	0.10						0	33.7	
1,3,5-Trimethylbenzene	ND	0.10						0	27.6	
1,2-Dichloroethane (EDC)	ND	0.10						0	20	
1,2-Dibromoethane (EDB)	ND	0.10						0	20	
Naphthalene	ND	0.20						0	20	
1-Methylnaphthalene	ND	0.40						0	20	
2-Methylnaphthalene	ND	0.40						0	20	
Acetone	ND	1.0						0	20	
Bromobenzene	ND	0.10						0	20	
Bromodichloromethane	ND	0.10						0	20	
Bromoform	ND	0.10						0	20	
Bromomethane	ND	0.20						0	20	
2-Butanone	ND	1.0						0	20	
Carbon disulfide	ND	1.0						0	20	
Carbon tetrachloride	ND	0.10						0	20	
Chlorobenzene	ND	0.10						0	20	
Chloroethane	ND	0.20						0	20	
Chloroform	ND	0.10						0	20	
Chloromethane	ND	0.10						0	20	
2-Chlorotoluene	ND	0.10						0	20	
4-Chlorotoluene	ND	0.10						0	20	
cis-1,2-DCE	ND	0.10						0	20	
cis-1,3-Dichloropropene	ND	0.10						0	20	
1,2-Dibromo-3-chloropropane	ND	0.20						0	20	
Dibromochloromethane	ND	0.10						0	20	
Dibromomethane	ND	0.20						0	20	
1,2-Dichlorobenzene	ND	0.10						0	20	
1,3-Dichlorobenzene	ND	0.10						0	20	
1,4-Dichlorobenzene	ND	0.10						0	20	
Dichlorodifluoromethane	ND	0.10						0	20	
1,1-Dichloroethane	ND	0.10						0	20	
1,1-Dichloroethene	ND	0.10						0	20	
1,2-Dichloropropane	ND	0.10						0	20	
1,3-Dichloropropane	ND	0.10						0	20	
2,2-Dichloropropane	ND	0.10						0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1408383**
15-Aug-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Process Center Month

Sample ID **1408383-001a DUP** SampType: **DUP** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **AS1_140807** Batch ID: **R20590** RunNo: **20590**
Prep Date: Analysis Date: **8/14/2014** SeqNo: **599052** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.10						0	20	
Hexachlorobutadiene	ND	0.10						0	20	
2-Hexanone	ND	1.0						0	20	
Isopropylbenzene	ND	0.10						0	20	
4-Isopropyltoluene	ND	0.10						0	20	
4-Methyl-2-pentanone	ND	1.0						0	20	
Methylene chloride	ND	0.30						0	20	
n-Butylbenzene	ND	0.30						0	20	
n-Propylbenzene	ND	0.10						0	20	
sec-Butylbenzene	ND	0.10						0	20	
Styrene	ND	0.10						0	20	
tert-Butylbenzene	ND	0.10						0	20	
1,1,1,2-Tetrachloroethane	ND	0.10						0	20	
1,1,2,2-Tetrachloroethane	ND	0.10						0	20	
Tetrachloroethene (PCE)	0.25	0.10						6.27	20	
trans-1,2-DCE	ND	0.10						0	20	
trans-1,3-Dichloropropene	ND	0.10						0	20	
1,2,3-Trichlorobenzene	ND	0.10						0	20	
1,2,4-Trichlorobenzene	ND	0.10						0	20	
1,1,1-Trichloroethane	ND	0.10						0	20	
1,1,2-Trichloroethane	ND	0.10						0	20	
Trichloroethene (TCE)	ND	0.10						0	20	
Trichlorofluoromethane	ND	0.10						0	20	
1,2,3-Trichloropropane	ND	0.20						0	20	
Vinyl chloride	ND	0.10						0	20	
Xylenes, Total	ND	0.15						0	25.8	
Surr: Dibromofluoromethane	0.99		1.000		99.2	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.94		1.000		94.5	70	130	0	0	
Surr: Toluene-d8	0.94		1.000		93.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.91		1.000		90.6	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1408383 RcptNo: 1

Received by/date: LM 08/08/14

Logged By: **Celina Sessa** 8/8/2014 8:55:00 AM Celina Sessa

Completed By: **Celina Sessa** 8/8/2014 9:22:11 AM Celina Sessa

Reviewed By: 08/08/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004 (88004)

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: 6R1665-WALNUT SUPERFUND PROCESS CENTER MONTHLY ANALYSIS

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1408383	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~ VOC)	8270 (Semi-VOA)					Air Bubbles (Y or N)
8/7/14	10:13	AIR	AS1_140807	1-Tedlar Bag	NONE	-001										X						
8/7/14	10:15	AIR	AS2_140807	1-Tedlar Bag	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/7/14	1500	Laura Montoya	[signature]	08/08/14	0855
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cr

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 14, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX (575) 528-3513

RE: Griggs-Walnut Superfund Process Center Monthly Analysis OrderNo.: 1408385

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/8/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1408385**
Date Reported: **8/14/2014**

CLIENT: City of Las Cruces
Client Sample ID: CLC27_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:14:00 AM
Lab ID: 1408385-001
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Toluene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Naphthalene	ND	2.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Acetone	ND	10		µg/L	1	8/12/2014 11:27:25 PM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Bromoform	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Bromomethane	ND	3.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
2-Butanone	ND	10		µg/L	1	8/12/2014 11:27:25 PM	R20527
Carbon disulfide	ND	10		µg/L	1	8/12/2014 11:27:25 PM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Chloroethane	ND	2.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Chloroform	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Chloromethane	ND	3.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/12/2014 11:27:25 PM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:14:00 AM
Lab ID: 1408385-001
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
2-Hexanone	ND	10		µg/L	1	8/12/2014 11:27:25 PM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/12/2014 11:27:25 PM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Styrene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Tetrachloroethene (PCE)	14	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/12/2014 11:27:25 PM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/12/2014 11:27:25 PM	R20527
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	8/12/2014 11:27:25 PM	R20527
Surr: 4-Bromofluorobenzene	87.4	70-130		%REC	1	8/12/2014 11:27:25 PM	R20527
Surr: Dibromofluoromethane	89.7	70-130		%REC	1	8/12/2014 11:27:25 PM	R20527
Surr: Toluene-d8	91.8	70-130		%REC	1	8/12/2014 11:27:25 PM	R20527

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_140807 Dupe
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:18:00 AM
Lab ID: 1408385-002
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 12:51:02 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Bromoform	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 12:51:02 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 12:51:02 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 12:51:02 AM	R20527

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_140807 Dupe
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:18:00 AM
Lab ID: 1408385-002
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 12:51:02 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 12:51:02 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Tetrachloroethene (PCE)	13	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 12:51:02 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 12:51:02 AM	R20527
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	8/13/2014 12:51:02 AM	R20527
Surr: 4-Bromofluorobenzene	89.6	70-130		%REC	1	8/13/2014 12:51:02 AM	R20527
Surr: Dibromofluoromethane	94.3	70-130		%REC	1	8/13/2014 12:51:02 AM	R20527
Surr: Toluene-d8	93.8	70-130		%REC	1	8/13/2014 12:51:02 AM	R20527

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:32:00 AM
Lab ID: 1408385-003
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 1:18:56 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Bromoform	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 1:18:56 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 1:18:56 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 1:18:56 AM	R20527

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:32:00 AM
Lab ID: 1408385-003
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 1:18:56 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 1:18:56 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Tetrachloroethene (PCE)	26	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 1:18:56 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 1:18:56 AM	R20527
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	8/13/2014 1:18:56 AM	R20527
Surr: 4-Bromofluorobenzene	88.9	70-130		%REC	1	8/13/2014 1:18:56 AM	R20527
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	8/13/2014 1:18:56 AM	R20527
Surr: Toluene-d8	94.5	70-130		%REC	1	8/13/2014 1:18:56 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:38:00 AM
Lab ID: 1408385-004
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 1:46:53 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Bromoform	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 1:46:53 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 1:46:53 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 1:46:53 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:38:00 AM
Lab ID: 1408385-004
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 1:46:53 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 1:46:53 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Tetrachloroethene (PCE)	14	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 1:46:53 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 1:46:53 AM	R20527
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	1	8/13/2014 1:46:53 AM	R20527
Surr: 4-Bromofluorobenzene	86.6	70-130		%REC	1	8/13/2014 1:46:53 AM	R20527
Surr: Dibromofluoromethane	94.4	70-130		%REC	1	8/13/2014 1:46:53 AM	R20527
Surr: Toluene-d8	92.3	70-130		%REC	1	8/13/2014 1:46:53 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:43:00 AM
Lab ID: 1408385-005
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 2:14:45 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Bromoform	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 2:14:45 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 2:14:45 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 2:14:45 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:43:00 AM
Lab ID: 1408385-005
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 2:14:45 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 2:14:45 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 2:14:45 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 2:14:45 AM	R20527
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	1	8/13/2014 2:14:45 AM	R20527
Surr: 4-Bromofluorobenzene	86.8	70-130		%REC	1	8/13/2014 2:14:45 AM	R20527
Surr: Dibromofluoromethane	91.8	70-130		%REC	1	8/13/2014 2:14:45 AM	R20527
Surr: Toluene-d8	91.6	70-130		%REC	1	8/13/2014 2:14:45 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:53:00 AM
Lab ID: 1408385-006
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 2:42:37 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Bromoform	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 2:42:37 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 2:42:37 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 2:42:37 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:53:00 AM
Lab ID: 1408385-006
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 2:42:37 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 2:42:37 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 2:42:37 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 2:42:37 AM	R20527
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	1	8/13/2014 2:42:37 AM	R20527
Surr: 4-Bromofluorobenzene	84.6	70-130		%REC	1	8/13/2014 2:42:37 AM	R20527
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	8/13/2014 2:42:37 AM	R20527
Surr: Toluene-d8	94.0	70-130		%REC	1	8/13/2014 2:42:37 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:59:00 AM
Lab ID: 1408385-007
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 3:10:25 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Bromodichloromethane	1.4	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Bromoform	5.0	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 3:10:25 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 3:10:25 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Dibromochloromethane	4.2	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 3:10:25 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_140807
Project: Griggs-Walnut Superfund Process Center
Collection Date: 8/7/2014 9:59:00 AM
Lab ID: 1408385-007
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 3:10:25 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 3:10:25 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 3:10:25 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 3:10:25 AM	R20527
Surr: 1,2-Dichloroethane-d4	90.5	70-130		%REC	1	8/13/2014 3:10:25 AM	R20527
Surr: 4-Bromofluorobenzene	85.7	70-130		%REC	1	8/13/2014 3:10:25 AM	R20527
Surr: Dibromofluoromethane	93.3	70-130		%REC	1	8/13/2014 3:10:25 AM	R20527
Surr: Toluene-d8	90.2	70-130		%REC	1	8/13/2014 3:10:25 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Griggs-Walnut Superfund Process Center
Collection Date:
Lab ID: 1408385-008
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Toluene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Ethylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Naphthalene	ND	2.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
2-Methylnaphthalene	ND	4.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Acetone	ND	10		µg/L	1	8/13/2014 3:38:13 AM	R20527
Bromobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Bromodichloromethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Bromoform	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Bromomethane	ND	3.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
2-Butanone	ND	10		µg/L	1	8/13/2014 3:38:13 AM	R20527
Carbon disulfide	ND	10		µg/L	1	8/13/2014 3:38:13 AM	R20527
Carbon Tetrachloride	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Chlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Chloroethane	ND	2.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Chloroform	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Chloromethane	ND	3.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
2-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
4-Chlorotoluene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
cis-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Dibromochloromethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Dibromomethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,1-Dichloroethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,1-Dichloroethene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,3-Dichloropropane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
2,2-Dichloropropane	ND	2.0		µg/L	1	8/13/2014 3:38:13 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Griggs-Walnut Superfund Process Center
Collection Date:
Lab ID: 1408385-008
Matrix: AQUEOUS
Received Date: 8/8/2014 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Hexachlorobutadiene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
2-Hexanone	ND	10		µg/L	1	8/13/2014 3:38:13 AM	R20527
Isopropylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
4-Isopropyltoluene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
4-Methyl-2-pentanone	ND	10		µg/L	1	8/13/2014 3:38:13 AM	R20527
Methylene Chloride	ND	3.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
n-Butylbenzene	ND	3.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
n-Propylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
sec-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Styrene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
tert-Butylbenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
trans-1,2-DCE	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Trichlorofluoromethane	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Vinyl chloride	ND	1.0		µg/L	1	8/13/2014 3:38:13 AM	R20527
Xylenes, Total	ND	1.5		µg/L	1	8/13/2014 3:38:13 AM	R20527
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	1	8/13/2014 3:38:13 AM	R20527
Surr: 4-Bromofluorobenzene	88.0	70-130		%REC	1	8/13/2014 3:38:13 AM	R20527
Surr: Dibromofluoromethane	96.5	70-130		%REC	1	8/13/2014 3:38:13 AM	R20527
Surr: Toluene-d8	90.8	70-130		%REC	1	8/13/2014 3:38:13 AM	R20527

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1408385**
14-Aug-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Process Center Month

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R20527** RunNo: **20527**
Prep Date: Analysis Date: **8/12/2014** SeqNo: **596937** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	113	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	20	1.0	20.00	0	98.2	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	120	82.6	131			
Trichloroethene (TCE)	23	1.0	20.00	0	113	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.4	70	130			
Surr: 4-Bromofluorobenzene	8.6		10.00		86.3	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.0	70	130			
Surr: Toluene-d8	9.1		10.00		91.3	70	130			

Sample ID **1408385-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CLC27_140807** Batch ID: **R20527** RunNo: **20527**
Prep Date: Analysis Date: **8/12/2014** SeqNo: **596941** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	20	1.0	20.00	0	98.1	67.5	123			
Chlorobenzene	18	1.0	20.00	0	91.9	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	120	81.9	134			
Trichloroethene (TCE)	21	1.0	20.00	0.3310	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	8.6		10.00		86.4	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID **1408385-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CLC27_140807** Batch ID: **R20527** RunNo: **20527**
Prep Date: Analysis Date: **8/13/2014** SeqNo: **596942** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130	5.15	20	
Toluene	20	1.0	20.00	0	97.6	67.5	123	0.533	20	
Chlorobenzene	19	1.0	20.00	0	93.6	70	130	1.85	20	
1,1-Dichloroethene	22	1.0	20.00	0	109	81.9	134	9.83	20	
Trichloroethene (TCE)	20	1.0	20.00	0.3310	100	70	130	5.52	20	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.6		10.00		85.6	70	130	0	0	
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130	0	0	
Surr: Toluene-d8	9.2		10.00		91.6	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1408385**
14-Aug-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Process Center Month

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R20527**	RunNo: **20527**			
Prep Date:	Analysis Date: **8/12/2014**	SeqNo: **596959**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1408385**
14-Aug-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Process Center Month

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R20527**	RunNo: **20527**			
Prep Date:	Analysis Date: **8/12/2014**	SeqNo: **596959**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	8.6		10.00		86.3	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.8	70	130			
Surr: Toluene-d8	9.1		10.00		91.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1408385 RcptNo: 1

Received by/date: LM 08/08/14

Logged By: **Celina Sessa** 8/8/2014 8:55:00 AM Celina Sessa

Completed By: **Celina Sessa** 8/8/2014 9:29:45 AM Celina Sessa

Reviewed By: 08/08/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: GRIGGS-WALNUT SUPERFUND PROCESS CENTER MONTHLY ANALYSIS

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1408385	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
7/14	09:14	Drink H_2O	CLC 27-140807	3-40ml Vial	$HgCl_2$	-001										X						
7/14	09:18	"	CLC 27-140807 Dupe	3-40ml Vial	$HgCl_2$	-002										X						
7/14	09:32	"	CLC 18-140807	3-40ml Vial	$HgCl_2$	-003										X						
7/14	09:38	"	ISI-140807	3-40ml Vial	$HgCl_2$	-004										X						
7/14	09:43	"	C1-140807	3-40ml Vial	$HgCl_2$	-005										X						
7/14	09:53	"	C2-140807	3-40ml Vial	$HgCl_2$	-006										X						
7/14	09:59	Drink H_2O	ESI-140807	3-40ml Vial	$HgCl_2$	-007										X						
7/14	UNK	LAB H_2O	TRIP BLANK	2-40ml Vial	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/14	1500	Laura Montoya	[signature]	08/08/14	0855
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cru

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 16, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs-Walnut Superfund Process Center Monthly Analysis OrderNo.: 1409154

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/4/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1409154**
Date Reported: **9/16/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-140903
Project: Griggs-Walnut Superfund Process Center
Collection Date: 9/3/2014 10:16:00 AM
Lab ID: 1409154-001
Matrix: AIR
Received Date: 9/4/2014 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Toluene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Ethylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Naphthalene	ND	0.20		µg/L	1	9/12/2014 1:16:09 PM	R21172
1-Methylnaphthalene	ND	0.40		µg/L	1	9/12/2014 1:16:09 PM	R21172
2-Methylnaphthalene	ND	0.40		µg/L	1	9/12/2014 1:16:09 PM	R21172
Acetone	ND	1.0		µg/L	1	9/12/2014 1:16:09 PM	R21172
Bromobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Bromodichloromethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Bromoform	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Bromomethane	ND	0.20		µg/L	1	9/12/2014 1:16:09 PM	R21172
2-Butanone	ND	1.0		µg/L	1	9/12/2014 1:16:09 PM	R21172
Carbon disulfide	ND	1.0		µg/L	1	9/12/2014 1:16:09 PM	R21172
Carbon tetrachloride	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Chlorobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Chloroethane	ND	0.20		µg/L	1	9/12/2014 1:16:09 PM	R21172
Chloroform	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Chloromethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
2-Chlorotoluene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
4-Chlorotoluene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
cis-1,2-DCE	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/12/2014 1:16:09 PM	R21172
Dibromochloromethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Dibromomethane	ND	0.20		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,1-Dichloroethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,1-Dichloroethene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2-Dichloropropane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,3-Dichloropropane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
2,2-Dichloropropane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-140903
Project: Griggs-Walnut Superfund Process Center
Collection Date: 9/3/2014 10:16:00 AM
Lab ID: 1409154-001
Matrix: AIR
Received Date: 9/4/2014 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Hexachlorobutadiene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
2-Hexanone	ND	1.0		µg/L	1	9/12/2014 1:16:09 PM	R21172
Isopropylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
4-Isopropyltoluene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/12/2014 1:16:09 PM	R21172
Methylene chloride	ND	0.30		µg/L	1	9/12/2014 1:16:09 PM	R21172
n-Butylbenzene	ND	0.30		µg/L	1	9/12/2014 1:16:09 PM	R21172
n-Propylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
sec-Butylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Styrene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
tert-Butylbenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Tetrachloroethene (PCE)	0.13	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
trans-1,2-DCE	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Trichlorofluoromethane	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/12/2014 1:16:09 PM	R21172
Vinyl chloride	ND	0.10		µg/L	1	9/12/2014 1:16:09 PM	R21172
Xylenes, Total	ND	0.15		µg/L	1	9/12/2014 1:16:09 PM	R21172
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	9/12/2014 1:16:09 PM	R21172
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	9/12/2014 1:16:09 PM	R21172
Surr: Toluene-d8	94.2	70-130		%REC	1	9/12/2014 1:16:09 PM	R21172
Surr: 4-Bromofluorobenzene	90.1	70-130		%REC	1	9/12/2014 1:16:09 PM	R21172

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-140903
Project: Griggs-Walnut Superfund Process Center
Collection Date: 9/3/2014 10:19:00 AM
Lab ID: 1409154-002
Matrix: AIR
Received Date: 9/4/2014 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Toluene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Ethylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Naphthalene	ND	0.20		µg/L	1	9/12/2014 2:12:15 PM	R21172
1-Methylnaphthalene	ND	0.40		µg/L	1	9/12/2014 2:12:15 PM	R21172
2-Methylnaphthalene	ND	0.40		µg/L	1	9/12/2014 2:12:15 PM	R21172
Acetone	ND	1.0		µg/L	1	9/12/2014 2:12:15 PM	R21172
Bromobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Bromodichloromethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Bromoform	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Bromomethane	ND	0.20		µg/L	1	9/12/2014 2:12:15 PM	R21172
2-Butanone	ND	1.0		µg/L	1	9/12/2014 2:12:15 PM	R21172
Carbon disulfide	ND	1.0		µg/L	1	9/12/2014 2:12:15 PM	R21172
Carbon tetrachloride	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Chlorobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Chloroethane	ND	0.20		µg/L	1	9/12/2014 2:12:15 PM	R21172
Chloroform	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Chloromethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
2-Chlorotoluene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
4-Chlorotoluene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
cis-1,2-DCE	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/12/2014 2:12:15 PM	R21172
Dibromochloromethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Dibromomethane	ND	0.20		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,1-Dichloroethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,1-Dichloroethene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2-Dichloropropane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,3-Dichloropropane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
2,2-Dichloropropane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-140903
Project: Griggs-Walnut Superfund Process Center
Collection Date: 9/3/2014 10:19:00 AM
Lab ID: 1409154-002
Matrix: AIR
Received Date: 9/4/2014 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Hexachlorobutadiene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
2-Hexanone	ND	1.0		µg/L	1	9/12/2014 2:12:15 PM	R21172
Isopropylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
4-Isopropyltoluene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/12/2014 2:12:15 PM	R21172
Methylene chloride	ND	0.30		µg/L	1	9/12/2014 2:12:15 PM	R21172
n-Butylbenzene	ND	0.30		µg/L	1	9/12/2014 2:12:15 PM	R21172
n-Propylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
sec-Butylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Styrene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
tert-Butylbenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Tetrachloroethene (PCE)	0.14	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
trans-1,2-DCE	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Trichlorofluoromethane	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/12/2014 2:12:15 PM	R21172
Vinyl chloride	ND	0.10		µg/L	1	9/12/2014 2:12:15 PM	R21172
Xylenes, Total	ND	0.15		µg/L	1	9/12/2014 2:12:15 PM	R21172
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	9/12/2014 2:12:15 PM	R21172
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%REC	1	9/12/2014 2:12:15 PM	R21172
Surr: Toluene-d8	95.1	70-130		%REC	1	9/12/2014 2:12:15 PM	R21172
Surr: 4-Bromofluorobenzene	90.3	70-130		%REC	1	9/12/2014 2:12:15 PM	R21172

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1409154 RcptNo: 1

Received by/date: A 09/04/14

Logged By: Anne Thorne 9/4/2014 8:50:00 AM Anne Thorne

Completed By: Anne Thorne 9/4/2014 Anne Thorne

Reviewed By: 09/04/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn Around Time:
☒ Standard ☐ Rush _____

Project Name: GRIGGS-WALNUT SUPERFUND PROCESS CENTER MONTHLY ANALYSIS

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☐ No

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409154	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/14	10:16	AIR	AS1_140903	1-Tedlar Bag	NONE	-001										X						
3/14	10:19	AIR	AS2_140903	1-Tedlar Bag	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date Time
3/14	1510	Laura Montoya	[illegible signature]	09/04/14 0850
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 15, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs-Walnut Superfund Proess Center Monthly Analysis OrderNo.: 1409195

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/4/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1409195**
Date Reported: **9/15/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:18:00 AM
Lab ID: 1409195-001
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Toluene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Ethylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Naphthalene	ND	2.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
2-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Acetone	ND	10		µg/L	1	9/10/2014 8:20:01 PM	R21135
Bromobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Bromodichloromethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Bromoform	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Bromomethane	ND	3.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
2-Butanone	ND	10		µg/L	1	9/10/2014 8:20:01 PM	R21135
Carbon disulfide	ND	10		µg/L	1	9/10/2014 8:20:01 PM	R21135
Carbon Tetrachloride	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Chlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Chloroethane	ND	2.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Chloroform	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Chloromethane	ND	3.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
2-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
4-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
cis-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Dibromochloromethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Dibromomethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,1-Dichloroethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,1-Dichloroethene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,3-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
2,2-Dichloropropane	ND	2.0		µg/L	1	9/10/2014 8:20:01 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:18:00 AM
Lab ID: 1409195-001
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Hexachlorobutadiene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
2-Hexanone	ND	10		µg/L	1	9/10/2014 8:20:01 PM	R21135
Isopropylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
4-Isopropyltoluene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
4-Methyl-2-pentanone	ND	10		µg/L	1	9/10/2014 8:20:01 PM	R21135
Methylene Chloride	ND	3.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
n-Butylbenzene	ND	3.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
n-Propylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
sec-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Styrene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
tert-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Tetrachloroethene (PCE)	12	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
trans-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Trichlorofluoromethane	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Vinyl chloride	ND	1.0		µg/L	1	9/10/2014 8:20:01 PM	R21135
Xylenes, Total	ND	1.5		µg/L	1	9/10/2014 8:20:01 PM	R21135
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	1	9/10/2014 8:20:01 PM	R21135
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	9/10/2014 8:20:01 PM	R21135
Surr: Dibromofluoromethane	83.9	70-130		%REC	1	9/10/2014 8:20:01 PM	R21135
Surr: Toluene-d8	93.8	70-130		%REC	1	9/10/2014 8:20:01 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:34:00 AM
Lab ID: 1409195-002
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Toluene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Ethylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Naphthalene	ND	2.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
2-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Acetone	ND	10		µg/L	1	9/10/2014 8:49:42 PM	R21135
Bromobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Bromodichloromethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Bromoform	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Bromomethane	ND	3.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
2-Butanone	ND	10		µg/L	1	9/10/2014 8:49:42 PM	R21135
Carbon disulfide	ND	10		µg/L	1	9/10/2014 8:49:42 PM	R21135
Carbon Tetrachloride	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Chlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Chloroethane	ND	2.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Chloroform	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Chloromethane	ND	3.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
2-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
4-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
cis-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Dibromochloromethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Dibromomethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,1-Dichloroethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,1-Dichloroethene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,3-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
2,2-Dichloropropane	ND	2.0		µg/L	1	9/10/2014 8:49:42 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:34:00 AM
Lab ID: 1409195-002
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Hexachlorobutadiene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
2-Hexanone	ND	10		µg/L	1	9/10/2014 8:49:42 PM	R21135
Isopropylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
4-Isopropyltoluene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
4-Methyl-2-pentanone	ND	10		µg/L	1	9/10/2014 8:49:42 PM	R21135
Methylene Chloride	ND	3.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
n-Butylbenzene	ND	3.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
n-Propylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
sec-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Styrene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
tert-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Tetrachloroethene (PCE)	21	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
trans-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Trichlorofluoromethane	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Vinyl chloride	ND	1.0		µg/L	1	9/10/2014 8:49:42 PM	R21135
Xylenes, Total	ND	1.5		µg/L	1	9/10/2014 8:49:42 PM	R21135
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	9/10/2014 8:49:42 PM	R21135
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	9/10/2014 8:49:42 PM	R21135
Surr: Dibromofluoromethane	85.2	70-130		%REC	1	9/10/2014 8:49:42 PM	R21135
Surr: Toluene-d8	90.6	70-130		%REC	1	9/10/2014 8:49:42 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-140903Dupe
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:35:00 AM
Lab ID: 1409195-003
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Toluene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Ethylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Naphthalene	ND	2.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
2-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Acetone	ND	10		µg/L	1	9/10/2014 9:19:22 PM	R21135
Bromobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Bromodichloromethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Bromoform	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Bromomethane	ND	3.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
2-Butanone	ND	10		µg/L	1	9/10/2014 9:19:22 PM	R21135
Carbon disulfide	ND	10		µg/L	1	9/10/2014 9:19:22 PM	R21135
Carbon Tetrachloride	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Chlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Chloroethane	ND	2.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Chloroform	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Chloromethane	ND	3.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
2-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
4-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
cis-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Dibromochloromethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Dibromomethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,1-Dichloroethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,1-Dichloroethene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,3-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
2,2-Dichloropropane	ND	2.0		µg/L	1	9/10/2014 9:19:22 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-140903Dupe
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:35:00 AM
Lab ID: 1409195-003
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Hexachlorobutadiene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
2-Hexanone	ND	10		µg/L	1	9/10/2014 9:19:22 PM	R21135
Isopropylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
4-Isopropyltoluene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
4-Methyl-2-pentanone	ND	10		µg/L	1	9/10/2014 9:19:22 PM	R21135
Methylene Chloride	ND	3.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
n-Butylbenzene	ND	3.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
n-Propylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
sec-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Styrene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
tert-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Tetrachloroethene (PCE)	23	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
trans-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Trichlorofluoromethane	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Vinyl chloride	ND	1.0		µg/L	1	9/10/2014 9:19:22 PM	R21135
Xylenes, Total	ND	1.5		µg/L	1	9/10/2014 9:19:22 PM	R21135
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%REC	1	9/10/2014 9:19:22 PM	R21135
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	1	9/10/2014 9:19:22 PM	R21135
Surr: Dibromofluoromethane	87.2	70-130		%REC	1	9/10/2014 9:19:22 PM	R21135
Surr: Toluene-d8	88.2	70-130		%REC	1	9/10/2014 9:19:22 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:43:00 AM
Lab ID: 1409195-004
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Toluene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Ethylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Naphthalene	ND	2.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
2-Methylnaphthalene	ND	4.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Acetone	ND	10		µg/L	1	9/10/2014 9:49:03 PM	R21135
Bromobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Bromodichloromethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Bromoform	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Bromomethane	ND	3.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
2-Butanone	ND	10		µg/L	1	9/10/2014 9:49:03 PM	R21135
Carbon disulfide	ND	10		µg/L	1	9/10/2014 9:49:03 PM	R21135
Carbon Tetrachloride	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Chlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Chloroethane	ND	2.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Chloroform	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Chloromethane	ND	3.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
2-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
4-Chlorotoluene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
cis-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Dibromochloromethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Dibromomethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,1-Dichloroethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,1-Dichloroethene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,3-Dichloropropane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
2,2-Dichloropropane	ND	2.0		µg/L	1	9/10/2014 9:49:03 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:43:00 AM
Lab ID: 1409195-004
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Hexachlorobutadiene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
2-Hexanone	ND	10		µg/L	1	9/10/2014 9:49:03 PM	R21135
Isopropylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
4-Isopropyltoluene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
4-Methyl-2-pentanone	ND	10		µg/L	1	9/10/2014 9:49:03 PM	R21135
Methylene Chloride	ND	3.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
n-Butylbenzene	ND	3.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
n-Propylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
sec-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Styrene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
tert-Butylbenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Tetrachloroethene (PCE)	15	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
trans-1,2-DCE	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Trichlorofluoromethane	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Vinyl chloride	ND	1.0		µg/L	1	9/10/2014 9:49:03 PM	R21135
Xylenes, Total	ND	1.5		µg/L	1	9/10/2014 9:49:03 PM	R21135
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	9/10/2014 9:49:03 PM	R21135
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	9/10/2014 9:49:03 PM	R21135
Surr: Dibromofluoromethane	85.2	70-130		%REC	1	9/10/2014 9:49:03 PM	R21135
Surr: Toluene-d8	91.9	70-130		%REC	1	9/10/2014 9:49:03 PM	R21135

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:53:00 AM
Lab ID: 1409195-005
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Toluene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Ethylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Naphthalene	ND	2.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
2-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Acetone	ND	10		µg/L	1	9/11/2014 3:03:43 PM	R21161
Bromobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Bromodichloromethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Bromoform	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Bromomethane	ND	3.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
2-Butanone	ND	10		µg/L	1	9/11/2014 3:03:43 PM	R21161
Carbon disulfide	ND	10		µg/L	1	9/11/2014 3:03:43 PM	R21161
Carbon Tetrachloride	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Chlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Chloroethane	ND	2.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Chloroform	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Chloromethane	ND	3.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
2-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
4-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
cis-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Dibromochloromethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Dibromomethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,1-Dichloroethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,1-Dichloroethene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,3-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
2,2-Dichloropropane	ND	2.0		µg/L	1	9/11/2014 3:03:43 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:53:00 AM
Lab ID: 1409195-005
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Hexachlorobutadiene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
2-Hexanone	ND	10		µg/L	1	9/11/2014 3:03:43 PM	R21161
Isopropylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
4-Isopropyltoluene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
4-Methyl-2-pentanone	ND	10		µg/L	1	9/11/2014 3:03:43 PM	R21161
Methylene Chloride	ND	3.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
n-Butylbenzene	ND	3.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
n-Propylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
sec-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Styrene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
tert-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
trans-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Trichlorofluoromethane	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Vinyl chloride	ND	1.0		µg/L	1	9/11/2014 3:03:43 PM	R21161
Xylenes, Total	ND	1.5		µg/L	1	9/11/2014 3:03:43 PM	R21161
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	9/11/2014 3:03:43 PM	R21161
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	1	9/11/2014 3:03:43 PM	R21161
Surr: Dibromofluoromethane	86.8	70-130		%REC	1	9/11/2014 3:03:43 PM	R21161
Surr: Toluene-d8	94.7	70-130		%REC	1	9/11/2014 3:03:43 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:56:00 AM
Lab ID: 1409195-006
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Toluene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Ethylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Naphthalene	ND	2.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
2-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Acetone	ND	10		µg/L	1	9/11/2014 3:33:28 PM	R21161
Bromobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Bromodichloromethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Bromoform	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Bromomethane	ND	3.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
2-Butanone	ND	10		µg/L	1	9/11/2014 3:33:28 PM	R21161
Carbon disulfide	ND	10		µg/L	1	9/11/2014 3:33:28 PM	R21161
Carbon Tetrachloride	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Chlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Chloroethane	ND	2.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Chloroform	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Chloromethane	ND	3.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
2-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
4-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
cis-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Dibromochloromethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Dibromomethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,1-Dichloroethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,1-Dichloroethene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,3-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
2,2-Dichloropropane	ND	2.0		µg/L	1	9/11/2014 3:33:28 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 9:56:00 AM
Lab ID: 1409195-006
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Hexachlorobutadiene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
2-Hexanone	ND	10		µg/L	1	9/11/2014 3:33:28 PM	R21161
Isopropylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
4-Isopropyltoluene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
4-Methyl-2-pentanone	ND	10		µg/L	1	9/11/2014 3:33:28 PM	R21161
Methylene Chloride	ND	3.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
n-Butylbenzene	ND	3.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
n-Propylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
sec-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Styrene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
tert-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
trans-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Trichlorofluoromethane	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Vinyl chloride	ND	1.0		µg/L	1	9/11/2014 3:33:28 PM	R21161
Xylenes, Total	ND	1.5		µg/L	1	9/11/2014 3:33:28 PM	R21161
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	9/11/2014 3:33:28 PM	R21161
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	9/11/2014 3:33:28 PM	R21161
Surr: Dibromofluoromethane	87.4	70-130		%REC	1	9/11/2014 3:33:28 PM	R21161
Surr: Toluene-d8	95.6	70-130		%REC	1	9/11/2014 3:33:28 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 10:07:00 AM
Lab ID: 1409195-007
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Toluene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Ethylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Naphthalene	ND	2.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
2-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Acetone	ND	10		µg/L	1	9/11/2014 1:34:40 PM	R21161
Bromobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Bromodichloromethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Bromoform	16	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Bromomethane	ND	3.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
2-Butanone	ND	10		µg/L	1	9/11/2014 1:34:40 PM	R21161
Carbon disulfide	ND	10		µg/L	1	9/11/2014 1:34:40 PM	R21161
Carbon Tetrachloride	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Chlorobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Chloroethane	ND	2.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Chloroform	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Chloromethane	ND	3.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
2-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
4-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
cis-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Dibromochloromethane	3.9	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Dibromomethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,1-Dichloroethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,1-Dichloroethene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,3-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
2,2-Dichloropropane	ND	2.0		µg/L	1	9/11/2014 1:34:40 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1-140903
Project: Griggs-Walnut Superfund Proess Center
Collection Date: 9/3/2014 10:07:00 AM
Lab ID: 1409195-007
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Hexachlorobutadiene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
2-Hexanone	ND	10		µg/L	1	9/11/2014 1:34:40 PM	R21161
Isopropylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
4-Isopropyltoluene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
4-Methyl-2-pentanone	ND	10		µg/L	1	9/11/2014 1:34:40 PM	R21161
Methylene Chloride	ND	3.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
n-Butylbenzene	ND	3.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
n-Propylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
sec-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Styrene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
tert-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
trans-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Trichlorofluoromethane	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Vinyl chloride	ND	1.0		µg/L	1	9/11/2014 1:34:40 PM	R21161
Xylenes, Total	ND	1.5		µg/L	1	9/11/2014 1:34:40 PM	R21161
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	9/11/2014 1:34:40 PM	R21161
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	9/11/2014 1:34:40 PM	R21161
Surr: Dibromofluoromethane	86.1	70-130		%REC	1	9/11/2014 1:34:40 PM	R21161
Surr: Toluene-d8	98.9	70-130		%REC	1	9/11/2014 1:34:40 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC Trip Blank
Project: Griggs-Walnut Superfund Proess Center
Collection Date:
Lab ID: 1409195-008
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Toluene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Ethylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Naphthalene	ND	2.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
2-Methylnaphthalene	ND	4.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Acetone	ND	10		µg/L	1	9/11/2014 4:03:12 PM	R21161
Bromobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Bromodichloromethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Bromoform	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Bromomethane	ND	3.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
2-Butanone	ND	10		µg/L	1	9/11/2014 4:03:12 PM	R21161
Carbon disulfide	ND	10		µg/L	1	9/11/2014 4:03:12 PM	R21161
Carbon Tetrachloride	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Chlorobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Chloroethane	ND	2.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Chloroform	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Chloromethane	ND	3.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
2-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
4-Chlorotoluene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
cis-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Dibromochloromethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Dibromomethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,1-Dichloroethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,1-Dichloroethene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,3-Dichloropropane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
2,2-Dichloropropane	ND	2.0		µg/L	1	9/11/2014 4:03:12 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC Trip Blank
Project: Griggs-Walnut Superfund Proess Center
Collection Date:
Lab ID: 1409195-008
Matrix: AQUEOUS
Received Date: 9/4/2014 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Hexachlorobutadiene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
2-Hexanone	ND	10		µg/L	1	9/11/2014 4:03:12 PM	R21161
Isopropylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
4-Isopropyltoluene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
4-Methyl-2-pentanone	ND	10		µg/L	1	9/11/2014 4:03:12 PM	R21161
Methylene Chloride	ND	3.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
n-Butylbenzene	ND	3.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
n-Propylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
sec-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Styrene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
tert-Butylbenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
trans-1,2-DCE	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Trichlorofluoromethane	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Vinyl chloride	ND	1.0		µg/L	1	9/11/2014 4:03:12 PM	R21161
Xylenes, Total	ND	1.5		µg/L	1	9/11/2014 4:03:12 PM	R21161
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	9/11/2014 4:03:12 PM	R21161
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	1	9/11/2014 4:03:12 PM	R21161
Surr: Dibromofluoromethane	88.5	70-130		%REC	1	9/11/2014 4:03:12 PM	R21161
Surr: Toluene-d8	94.0	70-130		%REC	1	9/11/2014 4:03:12 PM	R21161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1409195**
15-Sep-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Proess Center Monthl

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R21135**	RunNo: **21135**			
Prep Date:	Analysis Date: **9/10/2014**	SeqNo: **615279**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1409195**
15-Sep-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Proess Center Monthl

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21135** RunNo: **21135**
Prep Date: Analysis Date: **9/10/2014** SeqNo: **615279** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.3	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.5	70	130			
Surr: Toluene-d8	9.0		10.00		89.9	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21135** RunNo: **21135**
Prep Date: Analysis Date: **9/10/2014** SeqNo: **615300** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	101	80	120			
Chlorobenzene	20	1.0	20.00	0	99.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1409195**
15-Sep-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Proess Center Monthl

Sample ID **100ng lcs**	SampType: **LCS**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **LCSW**	Batch ID: **R21135**		RunNo: **21135**		
Prep Date:	Analysis Date: **9/10/2014**		SeqNo: **615300**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	108	82.6	131			
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.1	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.3	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.1	70	130			
Surr: Toluene-d8	9.5		10.00		94.6	70	130			

Sample ID **5ml-rb**	SampType: **MBLK**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **PBW**	Batch ID: **R21161**		RunNo: **21161**		
Prep Date:	Analysis Date: **9/11/2014**		SeqNo: **615902**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1409195**
15-Sep-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Proess Center Monthl

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R21161**	RunNo: **21161**			
Prep Date:	Analysis Date: **9/11/2014**	SeqNo: **615902**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1409195**
15-Sep-14

Client: City of Las Cruces
Project: Griggs-Walnut Superfund Proess Center Monthl

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21161** RunNo: **21161**
Prep Date: Analysis Date: **9/11/2014** SeqNo: **615902** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.3	70	130			
Surr: Toluene-d8	9.1		10.00		91.1	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21161** RunNo: **21161**
Prep Date: Analysis Date: **9/11/2014** SeqNo: **615906** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	86.9	70	130			
Toluene	22	1.0	20.00	0	112	80	120			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.6	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.7	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	8.5		10.00		84.8	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1409195 RcptNo: 1

Received by/date: AG 09/04/14

Logged By: Anne Thorne 9/4/2014 8:20:00 AM Anne Thorne

Completed By: Anne Thorne 9/4/2014 Anne Thorne

Reviewed By: CS 09/05/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☑ EDD (Type) EXCELL

Turn Around Time:
☑ Standard ☐ Rush _____

Project Name: GR1665-WALNUT SUPERFUND PROCESS CENTER MONTHLY ANALYSIS

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409195	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~ VOC)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/14	918	Drink H_2O	CLC27_140903	3-40ml Vial	$HgCl_2$	-001										X						
3/14	934	Drink H_2O	CLC18_140903	3-40ml Vial	$HgCl_2$	-002										X						
3/14	935	Drink H_2O	CLC18_140903Dupe	3-40ml Vial	$HgCl_2$	-003										X						
3/14	943	Drink H_2O	TS1_140903	3-40ml Vial	$HgCl_2$	-004										X						
3/14	953	Drink H_2O	C1_140903	3-40ml Vial	$HgCl_2$	-005										X						
3/14	956	Drink H_2O	C2_140903	3-40ml Vial	$HgCl_2$	-006										X						
3/14	1007	Drink H_2O	ES1_140903	3-40ml Vial	$HgCl_2$	-007										X						
3/14	unk	Lab H_2O	CLC TRIP BLANK	2-40ml Vial	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/14	1515	Laura Montoya		09/30/14	0820
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 10, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs_Walnut Joint Superfund Process Center Monthly Anal OrderNo.: 1410158

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/3/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1410158**
Date Reported: **10/10/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:08:00 AM
Lab ID: 1410158-001
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Toluene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Ethylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Naphthalene	ND	2.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
2-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Acetone	ND	10		µg/L	1	10/6/2014 6:46:42 PM	R21698
Bromobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Bromodichloromethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Bromoform	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Bromomethane	ND	3.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
2-Butanone	ND	10		µg/L	1	10/6/2014 6:46:42 PM	R21698
Carbon disulfide	ND	10		µg/L	1	10/6/2014 6:46:42 PM	R21698
Carbon Tetrachloride	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Chlorobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Chloroethane	ND	2.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Chloroform	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Chloromethane	ND	3.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
2-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
4-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
cis-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Dibromochloromethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Dibromomethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,1-Dichloroethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,1-Dichloroethene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,3-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
2,2-Dichloropropane	ND	2.0		µg/L	1	10/6/2014 6:46:42 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:08:00 AM
Lab ID: 1410158-001
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Hexachlorobutadiene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
2-Hexanone	ND	10		µg/L	1	10/6/2014 6:46:42 PM	R21698
Isopropylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
4-Isopropyltoluene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
4-Methyl-2-pentanone	ND	10		µg/L	1	10/6/2014 6:46:42 PM	R21698
Methylene Chloride	ND	3.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
n-Butylbenzene	ND	3.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
n-Propylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
sec-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Styrene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
tert-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Tetrachloroethene (PCE)	14	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
trans-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Trichlorofluoromethane	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Vinyl chloride	ND	1.0		µg/L	1	10/6/2014 6:46:42 PM	R21698
Xylenes, Total	ND	1.5		µg/L	1	10/6/2014 6:46:42 PM	R21698
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	10/6/2014 6:46:42 PM	R21698
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/6/2014 6:46:42 PM	R21698
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	10/6/2014 6:46:42 PM	R21698
Surr: Toluene-d8	86.5	70-130		%REC	1	10/6/2014 6:46:42 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:30:00 AM
Lab ID: 1410158-002
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Toluene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Ethylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Naphthalene	ND	2.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
2-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Acetone	ND	10		µg/L	1	10/6/2014 7:16:23 PM	R21698
Bromobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Bromodichloromethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Bromoform	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Bromomethane	ND	3.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
2-Butanone	ND	10		µg/L	1	10/6/2014 7:16:23 PM	R21698
Carbon disulfide	ND	10		µg/L	1	10/6/2014 7:16:23 PM	R21698
Carbon Tetrachloride	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Chlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Chloroethane	ND	2.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Chloroform	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Chloromethane	ND	3.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
2-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
4-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
cis-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Dibromochloromethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Dibromomethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,1-Dichloroethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,1-Dichloroethene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,3-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
2,2-Dichloropropane	ND	2.0		µg/L	1	10/6/2014 7:16:23 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:30:00 AM
Lab ID: 1410158-002
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Hexachlorobutadiene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
2-Hexanone	ND	10		µg/L	1	10/6/2014 7:16:23 PM	R21698
Isopropylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
4-Isopropyltoluene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
4-Methyl-2-pentanone	ND	10		µg/L	1	10/6/2014 7:16:23 PM	R21698
Methylene Chloride	ND	3.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
n-Butylbenzene	ND	3.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
n-Propylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
sec-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Styrene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
tert-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Tetrachloroethene (PCE)	31	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
trans-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Trichlorofluoromethane	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Vinyl chloride	ND	1.0		µg/L	1	10/6/2014 7:16:23 PM	R21698
Xylenes, Total	ND	1.5		µg/L	1	10/6/2014 7:16:23 PM	R21698
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	1	10/6/2014 7:16:23 PM	R21698
Surr: 4-Bromofluorobenzene	112	70-130		%REC	1	10/6/2014 7:16:23 PM	R21698
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	10/6/2014 7:16:23 PM	R21698
Surr: Toluene-d8	87.8	70-130		%REC	1	10/6/2014 7:16:23 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:36:00 AM
Lab ID: 1410158-003
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Toluene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Ethylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Naphthalene	ND	2.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
2-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Acetone	ND	10		µg/L	1	10/6/2014 7:46:02 PM	R21698
Bromobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Bromodichloromethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Bromoform	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Bromomethane	ND	3.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
2-Butanone	ND	10		µg/L	1	10/6/2014 7:46:02 PM	R21698
Carbon disulfide	ND	10		µg/L	1	10/6/2014 7:46:02 PM	R21698
Carbon Tetrachloride	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Chlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Chloroethane	ND	2.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Chloroform	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Chloromethane	ND	3.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
2-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
4-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
cis-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Dibromochloromethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Dibromomethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,1-Dichloroethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,1-Dichloroethene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,3-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
2,2-Dichloropropane	ND	2.0		µg/L	1	10/6/2014 7:46:02 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:36:00 AM
Lab ID: 1410158-003
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Hexachlorobutadiene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
2-Hexanone	ND	10		µg/L	1	10/6/2014 7:46:02 PM	R21698
Isopropylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
4-Isopropyltoluene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
4-Methyl-2-pentanone	ND	10		µg/L	1	10/6/2014 7:46:02 PM	R21698
Methylene Chloride	ND	3.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
n-Butylbenzene	ND	3.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
n-Propylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
sec-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Styrene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
tert-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Tetrachloroethene (PCE)	16	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
trans-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Trichlorofluoromethane	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Vinyl chloride	ND	1.0		µg/L	1	10/6/2014 7:46:02 PM	R21698
Xylenes, Total	ND	1.5		µg/L	1	10/6/2014 7:46:02 PM	R21698
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	1	10/6/2014 7:46:02 PM	R21698
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/6/2014 7:46:02 PM	R21698
Surr: Dibromofluoromethane	96.2	70-130		%REC	1	10/6/2014 7:46:02 PM	R21698
Surr: Toluene-d8	87.4	70-130		%REC	1	10/6/2014 7:46:02 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:42:00 AM
Lab ID: 1410158-004
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Toluene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Ethylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Naphthalene	ND	2.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
2-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Acetone	ND	10		µg/L	1	10/6/2014 8:15:33 PM	R21698
Bromobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Bromodichloromethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Bromoform	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Bromomethane	ND	3.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
2-Butanone	ND	10		µg/L	1	10/6/2014 8:15:33 PM	R21698
Carbon disulfide	ND	10		µg/L	1	10/6/2014 8:15:33 PM	R21698
Carbon Tetrachloride	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Chlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Chloroethane	ND	2.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Chloroform	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Chloromethane	ND	3.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
2-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
4-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
cis-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Dibromochloromethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Dibromomethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,1-Dichloroethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,1-Dichloroethene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,3-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
2,2-Dichloropropane	ND	2.0		µg/L	1	10/6/2014 8:15:33 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:42:00 AM
Lab ID: 1410158-004
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Hexachlorobutadiene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
2-Hexanone	ND	10		µg/L	1	10/6/2014 8:15:33 PM	R21698
Isopropylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
4-Isopropyltoluene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
4-Methyl-2-pentanone	ND	10		µg/L	1	10/6/2014 8:15:33 PM	R21698
Methylene Chloride	ND	3.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
n-Butylbenzene	ND	3.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
n-Propylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
sec-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Styrene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
tert-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
trans-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Trichlorofluoromethane	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Vinyl chloride	ND	1.0		µg/L	1	10/6/2014 8:15:33 PM	R21698
Xylenes, Total	ND	1.5		µg/L	1	10/6/2014 8:15:33 PM	R21698
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%REC	1	10/6/2014 8:15:33 PM	R21698
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/6/2014 8:15:33 PM	R21698
Surr: Dibromofluoromethane	93.6	70-130		%REC	1	10/6/2014 8:15:33 PM	R21698
Surr: Toluene-d8	90.1	70-130		%REC	1	10/6/2014 8:15:33 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_141002 Dupe
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:43:00 AM
Lab ID: 1410158-005
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Toluene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Ethylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Naphthalene	ND	2.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
2-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Acetone	ND	10		µg/L	1	10/6/2014 8:45:13 PM	R21698
Bromobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Bromodichloromethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Bromoform	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Bromomethane	ND	3.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
2-Butanone	ND	10		µg/L	1	10/6/2014 8:45:13 PM	R21698
Carbon disulfide	ND	10		µg/L	1	10/6/2014 8:45:13 PM	R21698
Carbon Tetrachloride	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Chlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Chloroethane	ND	2.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Chloroform	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Chloromethane	ND	3.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
2-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
4-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
cis-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Dibromochloromethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Dibromomethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,1-Dichloroethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,1-Dichloroethene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,3-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
2,2-Dichloropropane	ND	2.0		µg/L	1	10/6/2014 8:45:13 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_141002 Dupe
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:43:00 AM
Lab ID: 1410158-005
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Hexachlorobutadiene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
2-Hexanone	ND	10		µg/L	1	10/6/2014 8:45:13 PM	R21698
Isopropylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
4-Isopropyltoluene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
4-Methyl-2-pentanone	ND	10		µg/L	1	10/6/2014 8:45:13 PM	R21698
Methylene Chloride	ND	3.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
n-Butylbenzene	ND	3.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
n-Propylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
sec-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Styrene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
tert-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
trans-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Trichlorofluoromethane	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Vinyl chloride	ND	1.0		µg/L	1	10/6/2014 8:45:13 PM	R21698
Xylenes, Total	ND	1.5		µg/L	1	10/6/2014 8:45:13 PM	R21698
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	10/6/2014 8:45:13 PM	R21698
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/6/2014 8:45:13 PM	R21698
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	10/6/2014 8:45:13 PM	R21698
Surr: Toluene-d8	88.1	70-130		%REC	1	10/6/2014 8:45:13 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:55:00 AM
Lab ID: 1410158-006
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Toluene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Ethylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Naphthalene	ND	2.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
2-Methylnaphthalene	ND	4.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Acetone	ND	10		µg/L	1	10/6/2014 9:14:50 PM	R21698
Bromobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Bromodichloromethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Bromoform	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Bromomethane	ND	3.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
2-Butanone	ND	10		µg/L	1	10/6/2014 9:14:50 PM	R21698
Carbon disulfide	ND	10		µg/L	1	10/6/2014 9:14:50 PM	R21698
Carbon Tetrachloride	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Chlorobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Chloroethane	ND	2.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Chloroform	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Chloromethane	ND	3.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
2-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
4-Chlorotoluene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
cis-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Dibromochloromethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Dibromomethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,1-Dichloroethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,1-Dichloroethene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,3-Dichloropropane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
2,2-Dichloropropane	ND	2.0		µg/L	1	10/6/2014 9:14:50 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 9:55:00 AM
Lab ID: 1410158-006
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Hexachlorobutadiene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
2-Hexanone	ND	10		µg/L	1	10/6/2014 9:14:50 PM	R21698
Isopropylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
4-Isopropyltoluene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
4-Methyl-2-pentanone	ND	10		µg/L	1	10/6/2014 9:14:50 PM	R21698
Methylene Chloride	ND	3.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
n-Butylbenzene	ND	3.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
n-Propylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
sec-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Styrene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
tert-Butylbenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
trans-1,2-DCE	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Trichlorofluoromethane	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Vinyl chloride	ND	1.0		µg/L	1	10/6/2014 9:14:50 PM	R21698
Xylenes, Total	ND	1.5		µg/L	1	10/6/2014 9:14:50 PM	R21698
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	10/6/2014 9:14:50 PM	R21698
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/6/2014 9:14:50 PM	R21698
Surr: Dibromofluoromethane	93.6	70-130		%REC	1	10/6/2014 9:14:50 PM	R21698
Surr: Toluene-d8	86.9	70-130		%REC	1	10/6/2014 9:14:50 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 10:00:00 AM
Lab ID: 1410158-007
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Toluene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Ethylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Naphthalene	ND	2.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Acetone	ND	10		µg/L	1	10/7/2014 11:11:03 AM	R21731
Bromobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Bromoform	6.1	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Bromomethane	ND	3.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
2-Butanone	ND	10		µg/L	1	10/7/2014 11:11:03 AM	R21731
Carbon disulfide	ND	10		µg/L	1	10/7/2014 11:11:03 AM	R21731
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Chlorobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Chloroethane	ND	2.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Chloroform	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Chloromethane	ND	3.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Dibromochloromethane	2.3	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Dibromomethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2014 11:11:03 AM	R21731

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_141002
Project: Griggs_Walnut Joint Superfund Process
Collection Date: 10/2/2014 10:00:00 AM
Lab ID: 1410158-007
Matrix: AQUEOUS
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
2-Hexanone	ND	10		µg/L	1	10/7/2014 11:11:03 AM	R21731
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2014 11:11:03 AM	R21731
Methylene Chloride	ND	3.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Styrene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Vinyl chloride	ND	1.0		µg/L	1	10/7/2014 11:11:03 AM	R21731
Xylenes, Total	ND	1.5		µg/L	1	10/7/2014 11:11:03 AM	R21731
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	10/7/2014 11:11:03 AM	R21731
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	10/7/2014 11:11:03 AM	R21731
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	10/7/2014 11:11:03 AM	R21731
Surr: Toluene-d8	96.9	70-130		%REC	1	10/7/2014 11:11:03 AM	R21731

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Griggs_Walnut Joint Superfund Process
Collection Date:
Lab ID: 1410158-008
Matrix: TRIP BLANK
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Toluene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Ethylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Naphthalene	ND	2.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Acetone	ND	10		µg/L	1	10/7/2014 12:40:03 PM	R21731
Bromobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Bromoform	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Bromomethane	ND	3.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
2-Butanone	ND	10		µg/L	1	10/7/2014 12:40:03 PM	R21731
Carbon disulfide	ND	10		µg/L	1	10/7/2014 12:40:03 PM	R21731
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Chlorobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Chloroethane	ND	2.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Chloroform	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Chloromethane	ND	3.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Dibromomethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2014 12:40:03 PM	R21731

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Griggs_Walnut Joint Superfund Process
Collection Date:
Lab ID: 1410158-008
Matrix: TRIP BLANK
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
2-Hexanone	ND	10		µg/L	1	10/7/2014 12:40:03 PM	R21731
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2014 12:40:03 PM	R21731
Methylene Chloride	ND	3.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Styrene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Vinyl chloride	ND	1.0		µg/L	1	10/7/2014 12:40:03 PM	R21731
Xylenes, Total	ND	1.5		µg/L	1	10/7/2014 12:40:03 PM	R21731
Surr: 1,2-Dichloroethane-d4	65.5	70-130	S	%REC	1	10/7/2014 12:40:03 PM	R21731
Surr: 4-Bromofluorobenzene	112	70-130		%REC	1	10/7/2014 12:40:03 PM	R21731
Surr: Dibromofluoromethane	88.0	70-130		%REC	1	10/7/2014 12:40:03 PM	R21731
Surr: Toluene-d8	88.9	70-130		%REC	1	10/7/2014 12:40:03 PM	R21731

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1410158**
10-Oct-14

Client: City of Las Cruces
Project: Griggs_Walnut Joint Superfund Process Center

Sample ID **b1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R21698**	RunNo: **21698**			
Prep Date:	Analysis Date: **10/6/2014**	SeqNo: **636931**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1410158**
10-Oct-14

Client: City of Las Cruces
Project: Griggs_Walnut Joint Superfund Process Center

Sample ID **b1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21698** RunNo: **21698**
Prep Date: Analysis Date: **10/6/2014** SeqNo: **636931** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	13		10.00		127	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	13		10.00		126	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21698** RunNo: **21698**
Prep Date: Analysis Date: **10/6/2014** SeqNo: **636934** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	98.8	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1410158**
10-Oct-14

Client: City of Las Cruces
Project: Griggs_Walnut Joint Superfund Process Center

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21698** RunNo: **21698**
Prep Date: Analysis Date: **10/6/2014** SeqNo: **636934** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	25	1.0	20.00	0	123	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	96.1	70	130			
Surr: 1,2-Dichloroethane-d4	4.9		10.00		48.9	70	130			S
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.1	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21731** RunNo: **21731**
Prep Date: Analysis Date: **10/7/2014** SeqNo: **637952** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1410158**
10-Oct-14

Client: City of Las Cruces
Project: Griggs_Walnut Joint Superfund Process Center

Sample ID	**5mL-rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8260B: VOLATILES**		
Client ID:	**PBW**	Batch ID:	**R21731**	RunNo:	**21731**		
Prep Date:		Analysis Date:	**10/7/2014**	SeqNo:	**637952**	Units:	**µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1410158**
10-Oct-14

Client: City of Las Cruces
Project: Griggs_Walnut Joint Superfund Process Center

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R21731**	RunNo: **21731**
Prep Date:	Analysis Date: **10/7/2014**	SeqNo: **637952** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.4		10.00		94.5	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.2	70	130			
Surr: Toluene-d8	8.8		10.00		88.3	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R21731**	RunNo: **21731**
Prep Date:	Analysis Date: **10/7/2014**	SeqNo: **637957** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	20	1.0	20.00	0	100	80	120			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	82.6	131			
Trichloroethene (TCE)	18	1.0	20.00	0	90.3	70	130			
Surr: 1,2-Dichloroethane-d4	5.1		10.00		51.4	70	130			S
Surr: 4-Bromofluorobenzene	9.7		10.00		96.7	70	130			
Surr: Dibromofluoromethane	8.6		10.00		86.1	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1410158 RcptNo: 1

Received by/date: CS 10/03/14

Logged By: **Michelle Garcia** 10/3/2014 8:53:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/3/2014 10:58:16 AM Michelle Garcia

Reviewed By: CS 10/06/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575 - 528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Griggs-Walnut Joint Superfund Process Center Monthly Analysis

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1410158	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
9/2/14	9:08	Drink H_2O	CLC27_141002	3-40ml Vial	$HgCl_2$	-001										X						
9/2/14	9:30	Drink H_2O	CLC18_141002	3-40ml Vial	$HgCl_2$	-002										X						
9/2/14	9:36	Drink H_2O	IS1_141002	3-40ml Vial	$HgCl_2$	-003										X						
9/2/14	9:42	Drink H_2O	C1_141002	3-40ml Vial	$HgCl_2$	-004										X						
9/2/14	9:43	Drink H_2O	C1_141002 Dupe	3-40ml Vial	$HgCl_2$	-005										X						
9/2/14	9:55	Drink H_2O	C2_141002	3-40ml Vial	$HgCl_2$	-006										X						
9/2/14	10:00	Drink H_2O	ES1_141002	3-40ml Vial	$HgCl_2$	-007										X						
9/2/14	unk	Drink H_2O	CLC TRIP BLANK	2-40ml Vial	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/2/14	1315	Laura Montoya	Celina Sena	10/3/14	0853
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cru

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 10, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs Walnut Joint Superfund Project OrderNo.: 1410159

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/3/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1410159**
Date Reported: **10/10/2014**

CLIENT: City of Las Cruces
Client Sample ID: AS1-141002
Project: Griggs Walnut Joint Superfund Project
Collection Date: 10/2/2014 10:10:00 AM
Lab ID: 1410159-001
Matrix: AIR
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Toluene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Ethylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Naphthalene	ND	0.20		µg/L	1	10/6/2014 12:25:31 PM	R21698
1-Methylnaphthalene	ND	0.40		µg/L	1	10/6/2014 12:25:31 PM	R21698
2-Methylnaphthalene	ND	0.40		µg/L	1	10/6/2014 12:25:31 PM	R21698
Acetone	ND	1.0		µg/L	1	10/6/2014 12:25:31 PM	R21698
Bromobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Bromodichloromethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Bromoform	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Bromomethane	ND	0.20		µg/L	1	10/6/2014 12:25:31 PM	R21698
2-Butanone	ND	1.0		µg/L	1	10/6/2014 12:25:31 PM	R21698
Carbon disulfide	ND	1.0		µg/L	1	10/6/2014 12:25:31 PM	R21698
Carbon tetrachloride	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Chlorobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Chloroethane	ND	0.20		µg/L	1	10/6/2014 12:25:31 PM	R21698
Chloroform	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Chloromethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
2-Chlorotoluene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
4-Chlorotoluene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
cis-1,2-DCE	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	10/6/2014 12:25:31 PM	R21698
Dibromochloromethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Dibromomethane	ND	0.20		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2-Dichlorobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,3-Dichlorobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,4-Dichlorobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Dichlorodifluoromethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,1-Dichloroethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,1-Dichloroethene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2-Dichloropropane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,3-Dichloropropane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
2,2-Dichloropropane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-141002
Project: Griggs Walnut Joint Superfund Project
Collection Date: 10/2/2014 10:10:00 AM
Lab ID: 1410159-001
Matrix: AIR
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Hexachlorobutadiene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
2-Hexanone	ND	1.0		µg/L	1	10/6/2014 12:25:31 PM	R21698
Isopropylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
4-Isopropyltoluene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
4-Methyl-2-pentanone	ND	1.0		µg/L	1	10/6/2014 12:25:31 PM	R21698
Methylene chloride	ND	0.30		µg/L	1	10/6/2014 12:25:31 PM	R21698
n-Butylbenzene	ND	0.30		µg/L	1	10/6/2014 12:25:31 PM	R21698
n-Propylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
sec-Butylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Styrene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
tert-Butylbenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Tetrachloroethene (PCE)	0.14	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
trans-1,2-DCE	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,1,1-Trichloroethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,1,2-Trichloroethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Trichloroethene (TCE)	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Trichlorofluoromethane	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
1,2,3-Trichloropropane	ND	0.20		µg/L	1	10/6/2014 12:25:31 PM	R21698
Vinyl chloride	ND	0.10		µg/L	1	10/6/2014 12:25:31 PM	R21698
Xylenes, Total	ND	0.15		µg/L	1	10/6/2014 12:25:31 PM	R21698
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	10/6/2014 12:25:31 PM	R21698
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/6/2014 12:25:31 PM	R21698
Surr: Toluene-d8	89.6	70-130		%REC	1	10/6/2014 12:25:31 PM	R21698
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	1	10/6/2014 12:25:31 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-141002
Project: Griggs Walnut Joint Superfund Project
Collection Date: 10/2/2014 10:12:00 AM
Lab ID: 1410159-002
Matrix: AIR
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Toluene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Ethylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Naphthalene	ND	0.20		µg/L	1	10/6/2014 1:52:23 PM	R21698
1-Methylnaphthalene	ND	0.40		µg/L	1	10/6/2014 1:52:23 PM	R21698
2-Methylnaphthalene	ND	0.40		µg/L	1	10/6/2014 1:52:23 PM	R21698
Acetone	ND	1.0		µg/L	1	10/6/2014 1:52:23 PM	R21698
Bromobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Bromodichloromethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Bromoform	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Bromomethane	ND	0.20		µg/L	1	10/6/2014 1:52:23 PM	R21698
2-Butanone	ND	1.0		µg/L	1	10/6/2014 1:52:23 PM	R21698
Carbon disulfide	ND	1.0		µg/L	1	10/6/2014 1:52:23 PM	R21698
Carbon tetrachloride	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Chlorobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Chloroethane	ND	0.20		µg/L	1	10/6/2014 1:52:23 PM	R21698
Chloroform	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Chloromethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
2-Chlorotoluene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
4-Chlorotoluene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
cis-1,2-DCE	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	10/6/2014 1:52:23 PM	R21698
Dibromochloromethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Dibromomethane	ND	0.20		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2-Dichlorobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,3-Dichlorobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,4-Dichlorobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Dichlorodifluoromethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,1-Dichloroethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,1-Dichloroethene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2-Dichloropropane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,3-Dichloropropane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
2,2-Dichloropropane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-141002
Project: Griggs Walnut Joint Superfund Project
Collection Date: 10/2/2014 10:12:00 AM
Lab ID: 1410159-002
Matrix: AIR
Received Date: 10/3/2014 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Hexachlorobutadiene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
2-Hexanone	ND	1.0		µg/L	1	10/6/2014 1:52:23 PM	R21698
Isopropylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
4-Isopropyltoluene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
4-Methyl-2-pentanone	ND	1.0		µg/L	1	10/6/2014 1:52:23 PM	R21698
Methylene chloride	0.35	0.30		µg/L	1	10/6/2014 1:52:23 PM	R21698
n-Butylbenzene	ND	0.30		µg/L	1	10/6/2014 1:52:23 PM	R21698
n-Propylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
sec-Butylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Styrene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
tert-Butylbenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Tetrachloroethene (PCE)	0.13	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
trans-1,2-DCE	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,1,1-Trichloroethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,1,2-Trichloroethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Trichloroethene (TCE)	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Trichlorofluoromethane	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
1,2,3-Trichloropropane	ND	0.20		µg/L	1	10/6/2014 1:52:23 PM	R21698
Vinyl chloride	ND	0.10		µg/L	1	10/6/2014 1:52:23 PM	R21698
Xylenes, Total	ND	0.15		µg/L	1	10/6/2014 1:52:23 PM	R21698
Surr: Dibromofluoromethane	89.2	70-130		%REC	1	10/6/2014 1:52:23 PM	R21698
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	1	10/6/2014 1:52:23 PM	R21698
Surr: Toluene-d8	90.8	70-130		%REC	1	10/6/2014 1:52:23 PM	R21698
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/6/2014 1:52:23 PM	R21698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1410159 RcptNo: 1

Received by/date: CS 10/03/14

Logged By: **Michelle Garcia** 10/3/2014 8:53:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/3/2014 11:05:32 AM Michelle Garcia

Reviewed By: 10/03/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn Around Time:
☒ Standard ☐ Rush _____

Project Name: GRIGGS-WALNUT JOINT SUPERFUND PROCESS CENTER MONTHLY ANALYSIS

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1410159	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
10/2/14	10:10	AIR	AS1-141002	1-TEDLAR BAG	NONE	-001										X						
10/2/14	10:12	AIR	AS2-141002	1-TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/2/14	1315	Laura Montoya	Celina Sena	10/3/14	0853
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to LUIS GUERRA
Send invoice to:
Luis Guerra C/o City of Las Cruc

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 13, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs-Walnut Joint Superfund Process Center Monthly Analy OrderNo.: 1411278

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/7/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Case Narrative

WO#: **1411278**
Date: **11/13/2014**

CLIENT: City of Las Cruces
Project: Griggs-Walnut Joint Superfund Process Center

Analytical Notes Regarding EPA Method 8260:
The low level detections for methylene chloride are likely from the laboratory.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 10:08:00 AM
Lab ID: 1411278-001
Matrix: AIR
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Toluene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Ethylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Naphthalene	ND	0.20		µg/L	1	11/11/2014 11:03:12 AM	R22477
1-Methylnaphthalene	ND	0.40		µg/L	1	11/11/2014 11:03:12 AM	R22477
2-Methylnaphthalene	ND	0.40		µg/L	1	11/11/2014 11:03:12 AM	R22477
Acetone	ND	1.0		µg/L	1	11/11/2014 11:03:12 AM	R22477
Bromobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Bromodichloromethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Bromoform	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Bromomethane	ND	0.20		µg/L	1	11/11/2014 11:03:12 AM	R22477
2-Butanone	ND	1.0		µg/L	1	11/11/2014 11:03:12 AM	R22477
Carbon disulfide	ND	1.0		µg/L	1	11/11/2014 11:03:12 AM	R22477
Carbon tetrachloride	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Chlorobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Chloroethane	ND	0.20		µg/L	1	11/11/2014 11:03:12 AM	R22477
Chloroform	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Chloromethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
2-Chlorotoluene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
4-Chlorotoluene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
cis-1,2-DCE	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	11/11/2014 11:03:12 AM	R22477
Dibromochloromethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Dibromomethane	ND	0.20		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2-Dichlorobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,3-Dichlorobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,4-Dichlorobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Dichlorodifluoromethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,1-Dichloroethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,1-Dichloroethene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2-Dichloropropane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,3-Dichloropropane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
2,2-Dichloropropane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 10:08:00 AM
Lab ID: 1411278-001
Matrix: AIR
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Hexachlorobutadiene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
2-Hexanone	ND	1.0		µg/L	1	11/11/2014 11:03:12 AM	R22477
Isopropylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
4-Isopropyltoluene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
4-Methyl-2-pentanone	ND	1.0		µg/L	1	11/11/2014 11:03:12 AM	R22477
Methylene chloride	0.64	0.30		µg/L	1	11/11/2014 11:03:12 AM	R22477
n-Butylbenzene	ND	0.30		µg/L	1	11/11/2014 11:03:12 AM	R22477
n-Propylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
sec-Butylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Styrene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
tert-Butylbenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
trans-1,2-DCE	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,1,1-Trichloroethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,1,2-Trichloroethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Trichloroethene (TCE)	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Trichlorofluoromethane	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
1,2,3-Trichloropropane	ND	0.20		µg/L	1	11/11/2014 11:03:12 AM	R22477
Vinyl chloride	ND	0.10		µg/L	1	11/11/2014 11:03:12 AM	R22477
Xylenes, Total	ND	0.15		µg/L	1	11/11/2014 11:03:12 AM	R22477
Surr: Dibromofluoromethane	107	70-130		%REC	1	11/11/2014 11:03:12 AM	R22477
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	11/11/2014 11:03:12 AM	R22477
Surr: Toluene-d8	98.3	70-130		%REC	1	11/11/2014 11:03:12 AM	R22477
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	1	11/11/2014 11:03:12 AM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 10:10:00 AM
Lab ID: 1411278-002
Matrix: AIR
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Toluene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Ethylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Naphthalene	ND	0.20		µg/L	1	11/11/2014 12:01:29 PM	R22477
1-Methylnaphthalene	ND	0.40		µg/L	1	11/11/2014 12:01:29 PM	R22477
2-Methylnaphthalene	ND	0.40		µg/L	1	11/11/2014 12:01:29 PM	R22477
Acetone	ND	1.0		µg/L	1	11/11/2014 12:01:29 PM	R22477
Bromobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Bromodichloromethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Bromoform	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Bromomethane	ND	0.20		µg/L	1	11/11/2014 12:01:29 PM	R22477
2-Butanone	ND	1.0		µg/L	1	11/11/2014 12:01:29 PM	R22477
Carbon disulfide	ND	1.0		µg/L	1	11/11/2014 12:01:29 PM	R22477
Carbon tetrachloride	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Chlorobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Chloroethane	ND	0.20		µg/L	1	11/11/2014 12:01:29 PM	R22477
Chloroform	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Chloromethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
2-Chlorotoluene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
4-Chlorotoluene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
cis-1,2-DCE	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	11/11/2014 12:01:29 PM	R22477
Dibromochloromethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Dibromomethane	ND	0.20		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2-Dichlorobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,3-Dichlorobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,4-Dichlorobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Dichlorodifluoromethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,1-Dichloroethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,1-Dichloroethene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2-Dichloropropane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,3-Dichloropropane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
2,2-Dichloropropane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 10:10:00 AM
Lab ID: 1411278-002
Matrix: AIR
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Hexachlorobutadiene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
2-Hexanone	ND	1.0		µg/L	1	11/11/2014 12:01:29 PM	R22477
Isopropylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
4-Isopropyltoluene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
4-Methyl-2-pentanone	ND	1.0		µg/L	1	11/11/2014 12:01:29 PM	R22477
Methylene chloride	0.70	0.30		µg/L	1	11/11/2014 12:01:29 PM	R22477
n-Butylbenzene	ND	0.30		µg/L	1	11/11/2014 12:01:29 PM	R22477
n-Propylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
sec-Butylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Styrene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
tert-Butylbenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
trans-1,2-DCE	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,1,1-Trichloroethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,1,2-Trichloroethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Trichloroethene (TCE)	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Trichlorofluoromethane	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
1,2,3-Trichloropropane	ND	0.20		µg/L	1	11/11/2014 12:01:29 PM	R22477
Vinyl chloride	ND	0.10		µg/L	1	11/11/2014 12:01:29 PM	R22477
Xylenes, Total	ND	0.15		µg/L	1	11/11/2014 12:01:29 PM	R22477
Surr: Dibromofluoromethane	106	70-130		%REC	1	11/11/2014 12:01:29 PM	R22477
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	11/11/2014 12:01:29 PM	R22477
Surr: Toluene-d8	93.9	70-130		%REC	1	11/11/2014 12:01:29 PM	R22477
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	11/11/2014 12:01:29 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1411278 RcptNo: 1

Received by/date: CS 11/07/14

Logged By: **Ashley Gallegos** 11/7/2014 8:52:00 AM AG

Completed By: **Ashley Gallegos** 11/7/2014 10:20:00 AM AG

Reviewed By: CS 11/07/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:

Project #: 6R1665-WALNUT JOINT SUPERFUND PROCESS CONTROL MONTHLY ANALYSIS

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)
		Air	CS 11/07/14			1411278											
11/6/14	1008	Drink H2O	AS1-141106	3-40ml	$HgCl_2$	-001										X	
11/6/14	1010	Drink H2O Air	AS2-141106	3-40ml	$HgCl_2$	-002										X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/6/14	1500	Laura Montoya	Celina Sun	11/07/14	0852
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to Luis Guerra c/o City of Las C

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 13, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs-Walnut Joint Superfund Process Center Monthly Analy OrderNo.: 1411286

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/7/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1411286**
Date Reported: **11/13/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:26:00 AM
Lab ID: 1411286-001
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 2:59:06 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Bromoform	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 2:59:06 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 2:59:06 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 2:59:06 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:26:00 AM
Lab ID: 1411286-001
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 2:59:06 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 2:59:06 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Tetrachloroethene (PCE)	13	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 2:59:06 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 2:59:06 PM	R22477
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	11/11/2014 2:59:06 PM	R22477
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1	11/11/2014 2:59:06 PM	R22477
Surr: Dibromofluoromethane	107	70-130		%REC	1	11/11/2014 2:59:06 PM	R22477
Surr: Toluene-d8	92.1	70-130		%REC	1	11/11/2014 2:59:06 PM	R22477

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-141106 Dupe
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:28:00 AM
Lab ID: 1411286-002
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 4:28:24 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Bromoform	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 4:28:24 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 4:28:24 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 4:28:24 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-141106 Dupe
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:28:00 AM
Lab ID: 1411286-002
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 4:28:24 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 4:28:24 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Tetrachloroethene (PCE)	13	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 4:28:24 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 4:28:24 PM	R22477
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	11/11/2014 4:28:24 PM	R22477
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	1	11/11/2014 4:28:24 PM	R22477
Surr: Dibromofluoromethane	99.0	70-130		%REC	1	11/11/2014 4:28:24 PM	R22477
Surr: Toluene-d8	94.9	70-130		%REC	1	11/11/2014 4:28:24 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:38:00 AM
Lab ID: 1411286-003
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 4:58:15 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Bromoform	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 4:58:15 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 4:58:15 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 4:58:15 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:38:00 AM
Lab ID: 1411286-003
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 4:58:15 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 4:58:15 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Tetrachloroethene (PCE)	20	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 4:58:15 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 4:58:15 PM	R22477
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	11/11/2014 4:58:15 PM	R22477
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	1	11/11/2014 4:58:15 PM	R22477
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	11/11/2014 4:58:15 PM	R22477
Surr: Toluene-d8	88.5	70-130		%REC	1	11/11/2014 4:58:15 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:47:00 AM
Lab ID: 1411286-004
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 5:28:07 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Bromoform	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 5:28:07 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 5:28:07 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 5:28:07 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:47:00 AM
Lab ID: 1411286-004
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 5:28:07 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 5:28:07 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Tetrachloroethene (PCE)	16	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 5:28:07 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 5:28:07 PM	R22477
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%REC	1	11/11/2014 5:28:07 PM	R22477
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	11/11/2014 5:28:07 PM	R22477
Surr: Dibromofluoromethane	106	70-130		%REC	1	11/11/2014 5:28:07 PM	R22477
Surr: Toluene-d8	98.0	70-130		%REC	1	11/11/2014 5:28:07 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:51:00 AM
Lab ID: 1411286-005
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 5:57:59 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Bromoform	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 5:57:59 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 5:57:59 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 5:57:59 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:51:00 AM
Lab ID: 1411286-005
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 5:57:59 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 5:57:59 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 5:57:59 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 5:57:59 PM	R22477
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	11/11/2014 5:57:59 PM	R22477
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	11/11/2014 5:57:59 PM	R22477
Surr: Dibromofluoromethane	103	70-130		%REC	1	11/11/2014 5:57:59 PM	R22477
Surr: Toluene-d8	90.4	70-130		%REC	1	11/11/2014 5:57:59 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:55:00 AM
Lab ID: 1411286-006
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 6:27:45 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Bromoform	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 6:27:45 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 6:27:45 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 6:27:45 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 9:55:00 AM
Lab ID: 1411286-006
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 6:27:45 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 6:27:45 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 6:27:45 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 6:27:45 PM	R22477
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	1	11/11/2014 6:27:45 PM	R22477
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	11/11/2014 6:27:45 PM	R22477
Surr: Dibromofluoromethane	106	70-130		%REC	1	11/11/2014 6:27:45 PM	R22477
Surr: Toluene-d8	95.4	70-130		%REC	1	11/11/2014 6:27:45 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 10:00:00 AM
Lab ID: 1411286-007
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Toluene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Ethylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Naphthalene	ND	2.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Acetone	ND	10		µg/L	1	11/11/2014 6:57:32 PM	R22477
Bromobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Bromoform	4.7	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Bromomethane	ND	3.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
2-Butanone	ND	10		µg/L	1	11/11/2014 6:57:32 PM	R22477
Carbon disulfide	ND	10		µg/L	1	11/11/2014 6:57:32 PM	R22477
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Chlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Chloroethane	ND	2.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Chloroform	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Chloromethane	ND	3.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Dibromomethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2014 6:57:32 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1-141106
Project: Griggs-Walnut Joint Superfund Process C
Collection Date: 11/6/2014 10:00:00 AM
Lab ID: 1411286-007
Matrix: AQUEOUS
Received Date: 11/7/2014 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
2-Hexanone	ND	10		µg/L	1	11/11/2014 6:57:32 PM	R22477
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2014 6:57:32 PM	R22477
Methylene Chloride	ND	3.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Styrene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Vinyl chloride	ND	1.0		µg/L	1	11/11/2014 6:57:32 PM	R22477
Xylenes, Total	ND	1.5		µg/L	1	11/11/2014 6:57:32 PM	R22477
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	11/11/2014 6:57:32 PM	R22477
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	1	11/11/2014 6:57:32 PM	R22477
Surr: Dibromofluoromethane	103	70-130		%REC	1	11/11/2014 6:57:32 PM	R22477
Surr: Toluene-d8	89.9	70-130		%REC	1	11/11/2014 6:57:32 PM	R22477

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411286**
13-Nov-14

Client: City of Las Cruces
Project: Griggs-Walnut Joint Superfund Process Center

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22477**	RunNo: **22477**			
Prep Date:	Analysis Date: **11/11/2014**	SeqNo: **662579**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411286**
13-Nov-14

Client: City of Las Cruces
Project: Griggs-Walnut Joint Superfund Process Center

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22477** RunNo: **22477**
Prep Date: Analysis Date: **11/11/2014** SeqNo: **662579** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.7		10.00		86.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.5	70	130			
Surr: Toluene-d8	9.0		10.00		90.1	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22477** RunNo: **22477**
Prep Date: Analysis Date: **11/11/2014** SeqNo: **662599** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	99.4	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411286**
13-Nov-14

Client: City of Las Cruces
Project: Griggs-Walnut Joint Superfund Process Center

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22477** RunNo: **22477**
Prep Date: Analysis Date: **11/11/2014** SeqNo: **662599** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	116	82.6	131			
Trichloroethene (TCE)	20	1.0	20.00	0	99.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.7	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	8.7		10.00		87.5	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22477** RunNo: **22477**
Prep Date: Analysis Date: **11/11/2014** SeqNo: **662631** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411286**
13-Nov-14

Client: City of Las Cruces
Project: Griggs-Walnut Joint Superfund Process Center

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22477**	RunNo: **22477**			
Prep Date:	Analysis Date: **11/11/2014**	SeqNo: **662631**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411286**
13-Nov-14

Client: City of Las Cruces
Project: Griggs-Walnut Joint Superfund Process Center

Sample ID **b2**	SampType: **MBLK**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **PBW**	Batch ID: **R22477**		RunNo: **22477**		
Prep Date:	Analysis Date: **11/11/2014**		SeqNo: **662631**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.4		10.00		93.7	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.7		10.00		87.1	70	130			

Sample ID **100ng lcs2**	SampType: **LCS**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **LCSW**	Batch ID: **R22477**		RunNo: **22477**		
Prep Date:	Analysis Date: **11/11/2014**		SeqNo: **662636**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	82.6	131			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.0	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1411286 RcptNo: 1

Received by/date: CS 11/07/14

Logged By: **Ashley Gallegos** 11/7/2014 8:52:00 AM

Completed By: **Ashley Gallegos** 11/7/2014 11:06:40 AM

Reviewed By: CS 11/07/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☒ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:

Project #: GRIGGS-WALNUT JOINT SUPERFUND PROCESS CENTER MONTHLY ANALYSIS

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411286	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/6/14	926	Drink H_2O	CLC27-141106	3-40ml	$HgCl_2$	-001										X						
11/6/14	928	Drink H_2O	CLC27-141106 DUPE	3-40ml	$HgCl_2$	-002										X						
11/6/14	0938	Drink H_2O	CLC18-141106	3-40ml	$HgCl_2$	-003										X						
11/6/14	947	Drink H_2O	ISI-141106	3-40ml	$HgCl_2$	-004										X						
11/6/14	0951	Drink H_2O	C1-141106	3-40ml	$HgCl_2$	-005										X						
11/6/14	0955	Drink H_2O	C2-141106	3-40ml	$HgCl_2$	-006										X						
11/6/14	1000	Drink H_2O	ESI-141106	3-40ml	$HgCl_2$	-007										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/6/14	1500	Laura Montoya	Celina Sanz	11/07/14	0852
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 11, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Procees Center-Monthly OrderNo.: 1412254

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 12/4/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1412254**
Date Reported: **12/11/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_141203
Project: Joint Superfund Procees Center-Monthly
Collection Date: 12/3/2014 10:22:00 AM
Lab ID: 1412254-001
Matrix: AIR
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Toluene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Ethylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Naphthalene	ND	0.20		µg/L	1	12/9/2014 11:37:14 AM	R23035
1-Methylnaphthalene	ND	0.40		µg/L	1	12/9/2014 11:37:14 AM	R23035
2-Methylnaphthalene	ND	0.40		µg/L	1	12/9/2014 11:37:14 AM	R23035
Acetone	ND	1.0		µg/L	1	12/9/2014 11:37:14 AM	R23035
Bromobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Bromodichloromethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Bromoform	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Bromomethane	ND	0.20		µg/L	1	12/9/2014 11:37:14 AM	R23035
2-Butanone	ND	1.0		µg/L	1	12/9/2014 11:37:14 AM	R23035
Carbon disulfide	ND	1.0		µg/L	1	12/9/2014 11:37:14 AM	R23035
Carbon tetrachloride	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Chlorobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Chloroethane	ND	0.20		µg/L	1	12/9/2014 11:37:14 AM	R23035
Chloroform	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Chloromethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
2-Chlorotoluene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
4-Chlorotoluene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
cis-1,2-DCE	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/9/2014 11:37:14 AM	R23035
Dibromochloromethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Dibromomethane	ND	0.20		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,1-Dichloroethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,1-Dichloroethene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2-Dichloropropane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,3-Dichloropropane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
2,2-Dichloropropane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_141203
Project: Joint Superfund Procees Center-Monthly
Collection Date: 12/3/2014 10:22:00 AM
Lab ID: 1412254-001
Matrix: AIR
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Hexachlorobutadiene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
2-Hexanone	ND	1.0		µg/L	1	12/9/2014 11:37:14 AM	R23035
Isopropylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
4-Isopropyltoluene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/9/2014 11:37:14 AM	R23035
Methylene chloride	ND	0.30		µg/L	1	12/9/2014 11:37:14 AM	R23035
n-Butylbenzene	ND	0.30		µg/L	1	12/9/2014 11:37:14 AM	R23035
n-Propylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
sec-Butylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Styrene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
tert-Butylbenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Tetrachloroethene (PCE)	0.12	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
trans-1,2-DCE	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Trichlorofluoromethane	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/9/2014 11:37:14 AM	R23035
Vinyl chloride	ND	0.10		µg/L	1	12/9/2014 11:37:14 AM	R23035
Xylenes, Total	ND	0.15		µg/L	1	12/9/2014 11:37:14 AM	R23035
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	12/9/2014 11:37:14 AM	R23035
Surr: 1,2-Dichloroethane-d4	87.4	70-130		%REC	1	12/9/2014 11:37:14 AM	R23035
Surr: Toluene-d8	86.5	70-130		%REC	1	12/9/2014 11:37:14 AM	R23035
Surr: 4-Bromofluorobenzene	85.4	70-130		%REC	1	12/9/2014 11:37:14 AM	R23035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_141203
Project: Joint Superfund Procees Center-Monthly
Collection Date: 12/3/2014 10:24:00 AM
Lab ID: 1412254-002
Matrix: AIR
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Toluene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Ethylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Naphthalene	ND	0.20		µg/L	1	12/9/2014 12:35:41 PM	R23035
1-Methylnaphthalene	ND	0.40		µg/L	1	12/9/2014 12:35:41 PM	R23035
2-Methylnaphthalene	ND	0.40		µg/L	1	12/9/2014 12:35:41 PM	R23035
Acetone	ND	1.0		µg/L	1	12/9/2014 12:35:41 PM	R23035
Bromobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Bromodichloromethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Bromoform	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Bromomethane	ND	0.20		µg/L	1	12/9/2014 12:35:41 PM	R23035
2-Butanone	ND	1.0		µg/L	1	12/9/2014 12:35:41 PM	R23035
Carbon disulfide	ND	1.0		µg/L	1	12/9/2014 12:35:41 PM	R23035
Carbon tetrachloride	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Chlorobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Chloroethane	ND	0.20		µg/L	1	12/9/2014 12:35:41 PM	R23035
Chloroform	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Chloromethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
2-Chlorotoluene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
4-Chlorotoluene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
cis-1,2-DCE	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/9/2014 12:35:41 PM	R23035
Dibromochloromethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Dibromomethane	ND	0.20		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,1-Dichloroethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,1-Dichloroethene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2-Dichloropropane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,3-Dichloropropane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
2,2-Dichloropropane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_141203
Project: Joint Superfund Procees Center-Monthly
Collection Date: 12/3/2014 10:24:00 AM
Lab ID: 1412254-002
Matrix: AIR
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Hexachlorobutadiene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
2-Hexanone	ND	1.0		µg/L	1	12/9/2014 12:35:41 PM	R23035
Isopropylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
4-Isopropyltoluene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/9/2014 12:35:41 PM	R23035
Methylene chloride	ND	0.30		µg/L	1	12/9/2014 12:35:41 PM	R23035
n-Butylbenzene	ND	0.30		µg/L	1	12/9/2014 12:35:41 PM	R23035
n-Propylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
sec-Butylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Styrene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
tert-Butylbenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Tetrachloroethene (PCE)	0.12	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
trans-1,2-DCE	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Trichlorofluoromethane	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/9/2014 12:35:41 PM	R23035
Vinyl chloride	ND	0.10		µg/L	1	12/9/2014 12:35:41 PM	R23035
Xylenes, Total	ND	0.15		µg/L	1	12/9/2014 12:35:41 PM	R23035
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	12/9/2014 12:35:41 PM	R23035
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%REC	1	12/9/2014 12:35:41 PM	R23035
Surr: Toluene-d8	87.8	70-130		%REC	1	12/9/2014 12:35:41 PM	R23035
Surr: 4-Bromofluorobenzene	84.6	70-130		%REC	1	12/9/2014 12:35:41 PM	R23035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1412254** RcptNo: **1**

Received by/date: 12/04/14

Logged By: **Ashley Gallegos** **12/4/2014 9:00:00 AM**

Completed By: **Ashley Gallegos** **12/4/2014 1:49:00 PM**

Reviewed By: 12/05/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT Superfund Process Center - Monthly

Project #: "GRIGGS/WALNUT"

Project Manager: LUIS GUERRA
lguerra@las-cruces.org

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412254	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/14	1022	AIR	AS1-141203	1 Tedlar BAG	NONE	-001										X						
3/14	1024	AIR	AS2-141203	1 Tedlar BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/3/14	1500	Laura Montoya		12/04/14	0900
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to Luis Guerra c/o City of L.C.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 10, 2014

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Analysis OrderNo.: 1412260

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/4/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1412260**
Date Reported: **12/10/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:10:00 AM
Lab ID: 1412260-001
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Toluene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Ethylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Naphthalene	ND	2.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Acetone	ND	10		µg/L	1	12/5/2014 8:52:26 PM	R22970
Bromobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Bromoform	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Bromomethane	ND	3.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
2-Butanone	ND	10		µg/L	1	12/5/2014 8:52:26 PM	R22970
Carbon disulfide	ND	10		µg/L	1	12/5/2014 8:52:26 PM	R22970
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Chlorobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Chloroethane	ND	2.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Chloroform	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Chloromethane	ND	3.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Dibromomethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2014 8:52:26 PM	R22970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:10:00 AM
Lab ID: 1412260-001
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
2-Hexanone	ND	10		µg/L	1	12/5/2014 8:52:26 PM	R22970
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2014 8:52:26 PM	R22970
Methylene Chloride	ND	3.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Styrene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Tetrachloroethene (PCE)	13	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Vinyl chloride	ND	1.0		µg/L	1	12/5/2014 8:52:26 PM	R22970
Xylenes, Total	ND	1.5		µg/L	1	12/5/2014 8:52:26 PM	R22970
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	12/5/2014 8:52:26 PM	R22970
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	12/5/2014 8:52:26 PM	R22970
Surr: Dibromofluoromethane	98.9	70-130		%REC	1	12/5/2014 8:52:26 PM	R22970
Surr: Toluene-d8	93.5	70-130		%REC	1	12/5/2014 8:52:26 PM	R22970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:32:00 AM
Lab ID: 1412260-002
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Toluene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Ethylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Naphthalene	ND	2.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Acetone	ND	10		µg/L	1	12/5/2014 9:22:12 PM	R22970
Bromobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Bromoform	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Bromomethane	ND	3.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
2-Butanone	ND	10		µg/L	1	12/5/2014 9:22:12 PM	R22970
Carbon disulfide	ND	10		µg/L	1	12/5/2014 9:22:12 PM	R22970
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Chlorobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Chloroethane	ND	2.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Chloroform	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Chloromethane	ND	3.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Dibromomethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2014 9:22:12 PM	R22970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:32:00 AM
Lab ID: 1412260-002
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
2-Hexanone	ND	10		µg/L	1	12/5/2014 9:22:12 PM	R22970
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2014 9:22:12 PM	R22970
Methylene Chloride	ND	3.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Styrene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Tetrachloroethene (PCE)	24	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Vinyl chloride	ND	1.0		µg/L	1	12/5/2014 9:22:12 PM	R22970
Xylenes, Total	ND	1.5		µg/L	1	12/5/2014 9:22:12 PM	R22970
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	12/5/2014 9:22:12 PM	R22970
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	1	12/5/2014 9:22:12 PM	R22970
Surr: Dibromofluoromethane	98.8	70-130		%REC	1	12/5/2014 9:22:12 PM	R22970
Surr: Toluene-d8	98.5	70-130		%REC	1	12/5/2014 9:22:12 PM	R22970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:46:00 AM
Lab ID: 1412260-003
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Toluene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Ethylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Naphthalene	ND	2.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
2-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Acetone	ND	10		µg/L	1	12/8/2014 3:50:41 PM	R22999
Bromobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Bromodichloromethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Bromoform	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Bromomethane	ND	3.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
2-Butanone	ND	10		µg/L	1	12/8/2014 3:50:41 PM	R22999
Carbon disulfide	ND	10		µg/L	1	12/8/2014 3:50:41 PM	R22999
Carbon Tetrachloride	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Chlorobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Chloroethane	ND	2.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Chloroform	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Chloromethane	ND	3.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
2-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
4-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
cis-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Dibromochloromethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Dibromomethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,1-Dichloroethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,1-Dichloroethene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,3-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
2,2-Dichloropropane	ND	2.0		µg/L	1	12/8/2014 3:50:41 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:46:00 AM
Lab ID: 1412260-003
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Hexachlorobutadiene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
2-Hexanone	ND	10		µg/L	1	12/8/2014 3:50:41 PM	R22999
Isopropylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
4-Isopropyltoluene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
4-Methyl-2-pentanone	ND	10		µg/L	1	12/8/2014 3:50:41 PM	R22999
Methylene Chloride	ND	3.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
n-Butylbenzene	ND	3.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
n-Propylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
sec-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Styrene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
tert-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Tetrachloroethene (PCE)	12	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
trans-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Trichlorofluoromethane	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Vinyl chloride	ND	1.0		µg/L	1	12/8/2014 3:50:41 PM	R22999
Xylenes, Total	ND	1.5		µg/L	1	12/8/2014 3:50:41 PM	R22999
Surr: 1,2-Dichloroethane-d4	89.5	70-130		%REC	1	12/8/2014 3:50:41 PM	R22999
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	1	12/8/2014 3:50:41 PM	R22999
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	12/8/2014 3:50:41 PM	R22999
Surr: Toluene-d8	95.6	70-130		%REC	1	12/8/2014 3:50:41 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:52:00 AM
Lab ID: 1412260-004
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Toluene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Ethylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Naphthalene	ND	2.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
2-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Acetone	ND	10		µg/L	1	12/8/2014 4:20:26 PM	R22999
Bromobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Bromodichloromethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Bromoform	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Bromomethane	ND	3.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
2-Butanone	ND	10		µg/L	1	12/8/2014 4:20:26 PM	R22999
Carbon disulfide	ND	10		µg/L	1	12/8/2014 4:20:26 PM	R22999
Carbon Tetrachloride	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Chlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Chloroethane	ND	2.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Chloroform	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Chloromethane	ND	3.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
2-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
4-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
cis-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Dibromochloromethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Dibromomethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,1-Dichloroethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,1-Dichloroethene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,3-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
2,2-Dichloropropane	ND	2.0		µg/L	1	12/8/2014 4:20:26 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:52:00 AM
Lab ID: 1412260-004
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Hexachlorobutadiene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
2-Hexanone	ND	10		µg/L	1	12/8/2014 4:20:26 PM	R22999
Isopropylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
4-Isopropyltoluene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
4-Methyl-2-pentanone	ND	10		µg/L	1	12/8/2014 4:20:26 PM	R22999
Methylene Chloride	ND	3.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
n-Butylbenzene	ND	3.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
n-Propylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
sec-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Styrene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
tert-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
trans-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Trichlorofluoromethane	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Vinyl chloride	ND	1.0		µg/L	1	12/8/2014 4:20:26 PM	R22999
Xylenes, Total	ND	1.5		µg/L	1	12/8/2014 4:20:26 PM	R22999
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%REC	1	12/8/2014 4:20:26 PM	R22999
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	1	12/8/2014 4:20:26 PM	R22999
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	12/8/2014 4:20:26 PM	R22999
Surr: Toluene-d8	92.7	70-130		%REC	1	12/8/2014 4:20:26 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:57:00 AM
Lab ID: 1412260-005
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Toluene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Ethylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Naphthalene	ND	2.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
2-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Acetone	ND	10		µg/L	1	12/8/2014 4:50:05 PM	R22999
Bromobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Bromodichloromethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Bromoform	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Bromomethane	ND	3.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
2-Butanone	ND	10		µg/L	1	12/8/2014 4:50:05 PM	R22999
Carbon disulfide	ND	10		µg/L	1	12/8/2014 4:50:05 PM	R22999
Carbon Tetrachloride	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Chlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Chloroethane	ND	2.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Chloroform	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Chloromethane	ND	3.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
2-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
4-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
cis-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Dibromochloromethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Dibromomethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,1-Dichloroethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,1-Dichloroethene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,3-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
2,2-Dichloropropane	ND	2.0		µg/L	1	12/8/2014 4:50:05 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:57:00 AM
Lab ID: 1412260-005
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Hexachlorobutadiene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
2-Hexanone	ND	10		µg/L	1	12/8/2014 4:50:05 PM	R22999
Isopropylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
4-Isopropyltoluene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
4-Methyl-2-pentanone	ND	10		µg/L	1	12/8/2014 4:50:05 PM	R22999
Methylene Chloride	ND	3.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
n-Butylbenzene	ND	3.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
n-Propylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
sec-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Styrene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
tert-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
trans-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Trichlorofluoromethane	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Vinyl chloride	ND	1.0		µg/L	1	12/8/2014 4:50:05 PM	R22999
Xylenes, Total	ND	1.5		µg/L	1	12/8/2014 4:50:05 PM	R22999
Surr: 1,2-Dichloroethane-d4	85.3	70-130		%REC	1	12/8/2014 4:50:05 PM	R22999
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	1	12/8/2014 4:50:05 PM	R22999
Surr: Dibromofluoromethane	84.2	70-130		%REC	1	12/8/2014 4:50:05 PM	R22999
Surr: Toluene-d8	91.5	70-130		%REC	1	12/8/2014 4:50:05 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_141203DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:58:00 AM
Lab ID: 1412260-006
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Toluene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Ethylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Naphthalene	ND	2.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
2-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Acetone	ND	10		µg/L	1	12/8/2014 5:19:47 PM	R22999
Bromobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Bromodichloromethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Bromoform	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Bromomethane	ND	3.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
2-Butanone	ND	10		µg/L	1	12/8/2014 5:19:47 PM	R22999
Carbon disulfide	ND	10		µg/L	1	12/8/2014 5:19:47 PM	R22999
Carbon Tetrachloride	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Chlorobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Chloroethane	ND	2.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Chloroform	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Chloromethane	ND	3.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
2-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
4-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
cis-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Dibromochloromethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Dibromomethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,1-Dichloroethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,1-Dichloroethene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,3-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
2,2-Dichloropropane	ND	2.0		µg/L	1	12/8/2014 5:19:47 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_141203DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 9:58:00 AM
Lab ID: 1412260-006
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Hexachlorobutadiene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
2-Hexanone	ND	10		µg/L	1	12/8/2014 5:19:47 PM	R22999
Isopropylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
4-Isopropyltoluene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
4-Methyl-2-pentanone	ND	10		µg/L	1	12/8/2014 5:19:47 PM	R22999
Methylene Chloride	ND	3.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
n-Butylbenzene	ND	3.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
n-Propylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
sec-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Styrene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
tert-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
trans-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Trichlorofluoromethane	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Vinyl chloride	ND	1.0		µg/L	1	12/8/2014 5:19:47 PM	R22999
Xylenes, Total	ND	1.5		µg/L	1	12/8/2014 5:19:47 PM	R22999
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%REC	1	12/8/2014 5:19:47 PM	R22999
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1	12/8/2014 5:19:47 PM	R22999
Surr: Dibromofluoromethane	91.5	70-130		%REC	1	12/8/2014 5:19:47 PM	R22999
Surr: Toluene-d8	92.3	70-130		%REC	1	12/8/2014 5:19:47 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 10:06:00 AM
Lab ID: 1412260-007
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Toluene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Ethylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Naphthalene	ND	2.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
2-Methylnaphthalene	ND	4.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Acetone	ND	10		µg/L	1	12/8/2014 1:51:30 PM	R22999
Bromobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Bromodichloromethane	3.6	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Bromoform	3.3	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Bromomethane	ND	3.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
2-Butanone	ND	10		µg/L	1	12/8/2014 1:51:30 PM	R22999
Carbon disulfide	ND	10		µg/L	1	12/8/2014 1:51:30 PM	R22999
Carbon Tetrachloride	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Chlorobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Chloroethane	ND	2.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Chloroform	2.3	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Chloromethane	ND	3.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
2-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
4-Chlorotoluene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
cis-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Dibromochloromethane	5.0	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Dibromomethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,1-Dichloroethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,1-Dichloroethene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,3-Dichloropropane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
2,2-Dichloropropane	ND	2.0		µg/L	1	12/8/2014 1:51:30 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_141203
Project: Joint Superfund Process Center-Monthly
Collection Date: 12/3/2014 10:06:00 AM
Lab ID: 1412260-007
Matrix: AQUEOUS
Received Date: 12/4/2014 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Hexachlorobutadiene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
2-Hexanone	ND	10		µg/L	1	12/8/2014 1:51:30 PM	R22999
Isopropylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
4-Isopropyltoluene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
4-Methyl-2-pentanone	ND	10		µg/L	1	12/8/2014 1:51:30 PM	R22999
Methylene Chloride	ND	3.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
n-Butylbenzene	ND	3.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
n-Propylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
sec-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Styrene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
tert-Butylbenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
trans-1,2-DCE	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Trichlorofluoromethane	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Vinyl chloride	ND	1.0		µg/L	1	12/8/2014 1:51:30 PM	R22999
Xylenes, Total	ND	1.5		µg/L	1	12/8/2014 1:51:30 PM	R22999
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	12/8/2014 1:51:30 PM	R22999
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	12/8/2014 1:51:30 PM	R22999
Surr: Dibromofluoromethane	85.9	70-130		%REC	1	12/8/2014 1:51:30 PM	R22999
Surr: Toluene-d8	96.6	70-130		%REC	1	12/8/2014 1:51:30 PM	R22999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22970**	RunNo: **22970**			
Prep Date:	Analysis Date: **12/5/2014**	SeqNo: **678297**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22970** RunNo: **22970**
Prep Date: Analysis Date: **12/5/2014** SeqNo: **678297** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.3	70	130			
Surr: Toluene-d8	9.6		10.00		96.0	70	130			

Sample ID **100ngLcs200ngAnn** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22970** RunNo: **22970**
Prep Date: Analysis Date: **12/5/2014** SeqNo: **678299** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	114	70	130			
Toluene	22	1.0	20.00	0	111	80	120			
Chlorobenzene	21	1.0	20.00	0	105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **100ngLcs200ngAnn** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22970** RunNo: **22970**
Prep Date: Analysis Date: **12/5/2014** SeqNo: **678299** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	25	1.0	20.00	0	124	82.6	131			
Trichloroethene (TCE)	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.0	70	130			
Surr: Toluene-d8	9.1		10.00		91.0	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22999** RunNo: **22999**
Prep Date: Analysis Date: **12/8/2014** SeqNo: **679391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22999**	RunNo: **22999**			
Prep Date:	Analysis Date: **12/8/2014**	SeqNo: **679391**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22999** RunNo: **22999**
Prep Date: Analysis Date: **12/8/2014** SeqNo: **679391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.6	70	130			
Surr: Toluene-d8	9.1		10.00		91.1	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22999** RunNo: **22999**
Prep Date: Analysis Date: **12/8/2014** SeqNo: **679393** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	23	1.0	20.00	0	115	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	25	1.0	20.00	0	124	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	95.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.5	70	130			
Surr: Toluene-d8	9.7		10.00		96.9	70	130			

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22999** RunNo: **22999**
Prep Date: Analysis Date: **12/8/2014** SeqNo: **679421** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22999**	RunNo: **22999**			
Prep Date:	Analysis Date: **12/8/2014**	SeqNo: **679421**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1412260**
10-Dec-14

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Analysi

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22999** RunNo: **22999**
Prep Date: Analysis Date: **12/8/2014** SeqNo: **679421** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.2	70	130			
Surr: Toluene-d8	9.9		10.00		99.1	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22999** RunNo: **22999**
Prep Date: Analysis Date: **12/8/2014** SeqNo: **679423** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	103	80	120			
Chlorobenzene	19	1.0	20.00	0	97.5	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	120	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	95.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.4	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.2		10.00		92.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1412260** RcptNo: **1**

Received by/date: 12/04/14

Logged By: **Ashley Gallegos** **12/4/2014 9:00:00 AM**

Completed By: **Ashley Gallegos** **12/4/2014 2:40:12 PM**

Reviewed By: AJ 12/05/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT SUPERFUND Process Center – MONTHLY ANALYSIS

Project #: "GRIGGS / WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412257 60	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
12/3/14	09:10	Drink H_2O	CLC 27_141203	3-40ml	$HgCl_2$	-001										X						
12/3/14	09:32	Drink H_2O	CLC 18_141203	3-40ml	$HgCl_2$	-002										X						
12/3/14	09:46	Drink H_2O	ISI_141203	3-40ml	$HgCl_2$	-003										X						
12/3/14	09:52	Drink H_2O	C1_141203	3-40ml	$HgCl_2$	-004										X						
12/3/14	09:57	Drink H_2O	C2-141203	3-40ml	$HgCl_2$	-005										X						
12/3/14	09:58	Drink H_2O	C2-141203 DUPE	3-40ml	$HgCl_2$	-006										X						
12/3/14	10:06	Drink H_2O	ESI_141203	3-40ml	$HgCl_2$	-007										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/3/14	1500	Laura Montoya	[signature]	12/04/14	09:00
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to
Luis Guerra c/o City of Las Cruc

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 14, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center Monthly OrderNo.: 1501306

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/9/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1501306**
Date Reported: **1/14/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:56:00 AM
Lab ID: 1501306-001
Matrix: AIR
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Toluene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Ethylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Naphthalene	ND	0.20		µg/L	1	1/13/2015 12:11:05 PM	R23638
1-Methylnaphthalene	ND	0.40		µg/L	1	1/13/2015 12:11:05 PM	R23638
2-Methylnaphthalene	ND	0.40		µg/L	1	1/13/2015 12:11:05 PM	R23638
Acetone	ND	1.0		µg/L	1	1/13/2015 12:11:05 PM	R23638
Bromobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Bromodichloromethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Bromoform	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Bromomethane	ND	0.20		µg/L	1	1/13/2015 12:11:05 PM	R23638
2-Butanone	ND	1.0		µg/L	1	1/13/2015 12:11:05 PM	R23638
Carbon disulfide	ND	1.0		µg/L	1	1/13/2015 12:11:05 PM	R23638
Carbon tetrachloride	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Chlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Chloroethane	ND	0.20		µg/L	1	1/13/2015 12:11:05 PM	R23638
Chloroform	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Chloromethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
2-Chlorotoluene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
4-Chlorotoluene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
cis-1,2-DCE	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	1/13/2015 12:11:05 PM	R23638
Dibromochloromethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Dibromomethane	ND	0.20		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2-Dichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,3-Dichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,4-Dichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Dichlorodifluoromethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,1-Dichloroethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,1-Dichloroethene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2-Dichloropropane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,3-Dichloropropane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
2,2-Dichloropropane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:56:00 AM
Lab ID: 1501306-001
Matrix: AIR
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Hexachlorobutadiene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
2-Hexanone	ND	1.0		µg/L	1	1/13/2015 12:11:05 PM	R23638
Isopropylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
4-Isopropyltoluene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
4-Methyl-2-pentanone	ND	1.0		µg/L	1	1/13/2015 12:11:05 PM	R23638
Methylene chloride	ND	0.30		µg/L	1	1/13/2015 12:11:05 PM	R23638
n-Butylbenzene	ND	0.30		µg/L	1	1/13/2015 12:11:05 PM	R23638
n-Propylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
sec-Butylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Styrene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
tert-Butylbenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Tetrachloroethene (PCE)	0.20	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
trans-1,2-DCE	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,1,1-Trichloroethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,1,2-Trichloroethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Trichloroethene (TCE)	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Trichlorofluoromethane	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
1,2,3-Trichloropropane	ND	0.20		µg/L	1	1/13/2015 12:11:05 PM	R23638
Vinyl chloride	ND	0.10		µg/L	1	1/13/2015 12:11:05 PM	R23638
Xylenes, Total	ND	0.15		µg/L	1	1/13/2015 12:11:05 PM	R23638
Surr: Dibromofluoromethane	97.9	70-130		%REC	1	1/13/2015 12:11:05 PM	R23638
Surr: 1,2-Dichloroethane-d4	83.6	70-130		%REC	1	1/13/2015 12:11:05 PM	R23638
Surr: Toluene-d8	93.8	70-130		%REC	1	1/13/2015 12:11:05 PM	R23638
Surr: 4-Bromofluorobenzene	82.2	70-130		%REC	1	1/13/2015 12:11:05 PM	R23638

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:58:00 AM
Lab ID: 1501306-002
Matrix: AIR
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Toluene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Ethylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Naphthalene	ND	0.20		µg/L	1	1/13/2015 12:38:31 PM	R23638
1-Methylnaphthalene	ND	0.40		µg/L	1	1/13/2015 12:38:31 PM	R23638
2-Methylnaphthalene	ND	0.40		µg/L	1	1/13/2015 12:38:31 PM	R23638
Acetone	ND	1.0		µg/L	1	1/13/2015 12:38:31 PM	R23638
Bromobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Bromodichloromethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Bromoform	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Bromomethane	ND	0.20		µg/L	1	1/13/2015 12:38:31 PM	R23638
2-Butanone	ND	1.0		µg/L	1	1/13/2015 12:38:31 PM	R23638
Carbon disulfide	ND	1.0		µg/L	1	1/13/2015 12:38:31 PM	R23638
Carbon tetrachloride	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Chlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Chloroethane	ND	0.20		µg/L	1	1/13/2015 12:38:31 PM	R23638
Chloroform	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Chloromethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
2-Chlorotoluene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
4-Chlorotoluene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
cis-1,2-DCE	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	1/13/2015 12:38:31 PM	R23638
Dibromochloromethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Dibromomethane	ND	0.20		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2-Dichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,3-Dichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,4-Dichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Dichlorodifluoromethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,1-Dichloroethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,1-Dichloroethene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2-Dichloropropane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,3-Dichloropropane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
2,2-Dichloropropane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:58:00 AM
Lab ID: 1501306-002
Matrix: AIR
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Hexachlorobutadiene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
2-Hexanone	ND	1.0		µg/L	1	1/13/2015 12:38:31 PM	R23638
Isopropylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
4-Isopropyltoluene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
4-Methyl-2-pentanone	ND	1.0		µg/L	1	1/13/2015 12:38:31 PM	R23638
Methylene chloride	ND	0.30		µg/L	1	1/13/2015 12:38:31 PM	R23638
n-Butylbenzene	ND	0.30		µg/L	1	1/13/2015 12:38:31 PM	R23638
n-Propylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
sec-Butylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Styrene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
tert-Butylbenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Tetrachloroethene (PCE)	0.17	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
trans-1,2-DCE	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,1,1-Trichloroethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,1,2-Trichloroethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Trichloroethene (TCE)	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Trichlorofluoromethane	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
1,2,3-Trichloropropane	ND	0.20		µg/L	1	1/13/2015 12:38:31 PM	R23638
Vinyl chloride	ND	0.10		µg/L	1	1/13/2015 12:38:31 PM	R23638
Xylenes, Total	ND	0.15		µg/L	1	1/13/2015 12:38:31 PM	R23638
Surr: Dibromofluoromethane	93.4	70-130		%REC	1	1/13/2015 12:38:31 PM	R23638
Surr: 1,2-Dichloroethane-d4	78.5	70-130		%REC	1	1/13/2015 12:38:31 PM	R23638
Surr: Toluene-d8	91.1	70-130		%REC	1	1/13/2015 12:38:31 PM	R23638
Surr: 4-Bromofluorobenzene	85.8	70-130		%REC	1	1/13/2015 12:38:31 PM	R23638

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1501306 RcptNo: 1

Received by/date: AT 01/09/15

Logged By: **Lindsay Mangin** 1/9/2015 9:40:00 AM

Completed By: **Lindsay Mangin** 1/9/2015 9:54:23 AM

Reviewed By: AT 01/09/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Not Present			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT SUPERFUND Process Center Monthly

Project #: "6R166S / WALNUT"

Project Manager: Luis Guerra @ lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1501306	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
8/15	0956	AIR	AS1_150108	1-Tedlar Bag	NONE	-001										X						
8/15	0958	AIR	AS2_150108	1-Tedlar Bag	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/15	1330	Laura Montoya	[signature]	01/09/15	0940
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra

Send invoice to: Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 13, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center Monthly OrderNo.: 1501312

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/9/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1501312**
Date Reported: **1/13/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 8:58:00 AM
Lab ID: 1501312-001
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 4:42:42 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Bromodichloromethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Bromoform	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 4:42:42 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 4:42:42 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Chloroform	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Dibromochloromethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 4:42:42 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 8:58:00 AM
Lab ID: 1501312-001
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 4:42:42 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 4:42:42 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Tetrachloroethene (PCE)	15	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 4:42:42 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 4:42:42 PM	R23601
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	1	1/12/2015 4:42:42 PM	R23601
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	1	1/12/2015 4:42:42 PM	R23601
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	1/12/2015 4:42:42 PM	R23601
Surr: Toluene-d8	103	70-130		%REC	1	1/12/2015 4:42:42 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:28:00 AM
Lab ID: 1501312-002
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 6:08:52 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Bromodichloromethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Bromoform	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 6:08:52 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 6:08:52 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Chloroform	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Dibromochloromethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 6:08:52 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:28:00 AM
Lab ID: 1501312-002
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 6:08:52 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 6:08:52 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Tetrachloroethene (PCE)	26	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 6:08:52 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 6:08:52 PM	R23601
Surr: 1,2-Dichloroethane-d4	109	70-130		%REC	1	1/12/2015 6:08:52 PM	R23601
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	1	1/12/2015 6:08:52 PM	R23601
Surr: Dibromofluoromethane	109	70-130		%REC	1	1/12/2015 6:08:52 PM	R23601
Surr: Toluene-d8	103	70-130		%REC	1	1/12/2015 6:08:52 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150108DUP
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:29:00 AM
Lab ID: 1501312-003
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 6:37:41 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Bromodichloromethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Bromoform	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 6:37:41 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 6:37:41 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Chloroform	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Dibromochloromethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 6:37:41 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150108DUP
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:29:00 AM
Lab ID: 1501312-003
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 6:37:41 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 6:37:41 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Tetrachloroethene (PCE)	23	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 6:37:41 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 6:37:41 PM	R23601
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	1	1/12/2015 6:37:41 PM	R23601
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	1	1/12/2015 6:37:41 PM	R23601
Surr: Dibromofluoromethane	92.8	70-130		%REC	1	1/12/2015 6:37:41 PM	R23601
Surr: Toluene-d8	91.3	70-130		%REC	1	1/12/2015 6:37:41 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:38:00 AM
Lab ID: 1501312-004
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 7:06:30 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Bromodichloromethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Bromoform	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 7:06:30 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 7:06:30 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Chloroform	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Dibromochloromethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 7:06:30 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:38:00 AM
Lab ID: 1501312-004
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 7:06:30 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 7:06:30 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Tetrachloroethene (PCE)	14	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 7:06:30 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 7:06:30 PM	R23601
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	1/12/2015 7:06:30 PM	R23601
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	1/12/2015 7:06:30 PM	R23601
Surr: Dibromofluoromethane	96.2	70-130		%REC	1	1/12/2015 7:06:30 PM	R23601
Surr: Toluene-d8	98.9	70-130		%REC	1	1/12/2015 7:06:30 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:43:00 AM
Lab ID: 1501312-005
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 7:35:09 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Bromodichloromethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Bromoform	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 7:35:09 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 7:35:09 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Chloroform	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Dibromochloromethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 7:35:09 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:43:00 AM
Lab ID: 1501312-005
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 7:35:09 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 7:35:09 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 7:35:09 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 7:35:09 PM	R23601
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	1/12/2015 7:35:09 PM	R23601
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	1	1/12/2015 7:35:09 PM	R23601
Surr: Dibromofluoromethane	96.5	70-130		%REC	1	1/12/2015 7:35:09 PM	R23601
Surr: Toluene-d8	102	70-130		%REC	1	1/12/2015 7:35:09 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:47:00 AM
Lab ID: 1501312-006
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 8:04:01 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Bromodichloromethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Bromoform	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 8:04:01 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 8:04:01 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Chloroform	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Dibromochloromethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 8:04:01 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:47:00 AM
Lab ID: 1501312-006
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 8:04:01 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 8:04:01 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 8:04:01 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 8:04:01 PM	R23601
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	1/12/2015 8:04:01 PM	R23601
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1	1/12/2015 8:04:01 PM	R23601
Surr: Dibromofluoromethane	102	70-130		%REC	1	1/12/2015 8:04:01 PM	R23601
Surr: Toluene-d8	92.9	70-130		%REC	1	1/12/2015 8:04:01 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:50:00 AM
Lab ID: 1501312-007
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Toluene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Ethylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Naphthalene	ND	2.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
2-Methylnaphthalene	ND	4.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Acetone	ND	10		µg/L	1	1/12/2015 8:32:47 PM	R23601
Bromobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Bromodichloromethane	4.3	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Bromoform	2.9	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Bromomethane	ND	3.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
2-Butanone	ND	10		µg/L	1	1/12/2015 8:32:47 PM	R23601
Carbon disulfide	ND	10		µg/L	1	1/12/2015 8:32:47 PM	R23601
Carbon Tetrachloride	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Chlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Chloroethane	ND	2.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Chloroform	3.5	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Chloromethane	ND	3.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
2-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
4-Chlorotoluene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
cis-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Dibromochloromethane	5.6	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Dibromomethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,1-Dichloroethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,1-Dichloroethene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,3-Dichloropropane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
2,2-Dichloropropane	ND	2.0		µg/L	1	1/12/2015 8:32:47 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150108
Project: Joint Superfund Process Center Monthly
Collection Date: 1/8/2015 9:50:00 AM
Lab ID: 1501312-007
Matrix: AQUEOUS
Received Date: 1/9/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Hexachlorobutadiene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
2-Hexanone	ND	10		µg/L	1	1/12/2015 8:32:47 PM	R23601
Isopropylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
4-Isopropyltoluene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
4-Methyl-2-pentanone	ND	10		µg/L	1	1/12/2015 8:32:47 PM	R23601
Methylene Chloride	ND	3.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
n-Butylbenzene	ND	3.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
n-Propylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
sec-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Styrene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
tert-Butylbenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
trans-1,2-DCE	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Trichlorofluoromethane	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Vinyl chloride	ND	1.0		µg/L	1	1/12/2015 8:32:47 PM	R23601
Xylenes, Total	ND	1.5		µg/L	1	1/12/2015 8:32:47 PM	R23601
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	1/12/2015 8:32:47 PM	R23601
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	1/12/2015 8:32:47 PM	R23601
Surr: Dibromofluoromethane	103	70-130		%REC	1	1/12/2015 8:32:47 PM	R23601
Surr: Toluene-d8	99.8	70-130		%REC	1	1/12/2015 8:32:47 PM	R23601

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1501312**
13-Jan-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R23601**	RunNo: **23601**			
Prep Date:	Analysis Date: **1/12/2015**	SeqNo: **697034**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1501312**
13-Jan-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R23601** RunNo: **23601**
Prep Date: Analysis Date: **1/12/2015** SeqNo: **697034** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.9	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R23601** RunNo: **23601**
Prep Date: Analysis Date: **1/12/2015** SeqNo: **697038** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.8	70	130			
Toluene	20	1.0	20.00	0	98.0	70	130			
Chlorobenzene	20	1.0	20.00	0	98.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1501312**
13-Jan-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R23601**	RunNo: **23601**			
Prep Date:	Analysis Date: **1/12/2015**	SeqNo: **697038**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	109	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.5	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1501312 RcptNo: 1

Received by/date: CS 01/09/15

Logged By: **Lindsay Mangin** 1/9/2015 9:40:00 AM

Completed By: **Lindsay Mangin** 1/9/2015 10:23:50 AM

Reviewed By: 01/09/2015

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Joint Superfund Process Center-Monthly

Project #: "6R1665 / WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.7°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1501312	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
8/15	08:58	Drink H2O	CLC 27-150108	3-40ml	HgCl2	-001										X						
	09:28	Drink H2O	CLC 18-150108	3-40ml	HgCl2	-002										X						
	09:29	Drink H2O	CLC 18-150108 Dup	3-40ml	HgCl2	-003										X						
	09:38	Drink H2O	ISI-150108	3-40ml	HgCl2	-004										X						
	0943	Drink H2O	C1-150108	3-40ml	HgCl2	-005										X						
	0947	Drink H2O	C2-150108	3-40ml	HgCl2	-006										X						
8/15	0950	Drink H2O	ESI-150108	3-40ml	HgCl2	-007										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/15	1330	Laura Montoya	Celine Smith	01/09/15	0940
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 17, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center Monthly Samples OrderNo.: 1502279

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/6/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:14:00 AM
Lab ID: 1502279-001
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Toluene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Ethylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Naphthalene	ND	2.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
2-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Acetone	ND	10		µg/L	1	2/11/2015 7:03:58 PM	R24238
Bromobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Bromodichloromethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Bromoform	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Bromomethane	ND	3.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
2-Butanone	ND	10		µg/L	1	2/11/2015 7:03:58 PM	R24238
Carbon disulfide	ND	10		µg/L	1	2/11/2015 7:03:58 PM	R24238
Carbon Tetrachloride	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Chlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Chloroethane	ND	2.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Chloroform	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Chloromethane	ND	3.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
2-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
4-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
cis-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Dibromochloromethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Dibromomethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,1-Dichloroethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,1-Dichloroethene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,3-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
2,2-Dichloropropane	ND	2.0		µg/L	1	2/11/2015 7:03:58 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:14:00 AM
Lab ID: 1502279-001
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Hexachlorobutadiene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
2-Hexanone	ND	10		µg/L	1	2/11/2015 7:03:58 PM	R24238
Isopropylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
4-Isopropyltoluene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
4-Methyl-2-pentanone	ND	10		µg/L	1	2/11/2015 7:03:58 PM	R24238
Methylene Chloride	ND	3.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
n-Butylbenzene	ND	3.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
n-Propylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
sec-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Styrene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
tert-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Tetrachloroethene (PCE)	13	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
trans-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Trichlorofluoromethane	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Vinyl chloride	ND	1.0		µg/L	1	2/11/2015 7:03:58 PM	R24238
Xylenes, Total	ND	1.5		µg/L	1	2/11/2015 7:03:58 PM	R24238
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%REC	1	2/11/2015 7:03:58 PM	R24238
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	1	2/11/2015 7:03:58 PM	R24238
Surr: Dibromofluoromethane	86.8	70-130		%REC	1	2/11/2015 7:03:58 PM	R24238
Surr: Toluene-d8	86.9	70-130		%REC	1	2/11/2015 7:03:58 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:35:00 AM
Lab ID: 1502279-002
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Toluene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Ethylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Naphthalene	ND	2.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
2-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Acetone	ND	10		µg/L	1	2/11/2015 7:32:28 PM	R24238
Bromobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Bromodichloromethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Bromoform	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Bromomethane	ND	3.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
2-Butanone	ND	10		µg/L	1	2/11/2015 7:32:28 PM	R24238
Carbon disulfide	ND	10		µg/L	1	2/11/2015 7:32:28 PM	R24238
Carbon Tetrachloride	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Chlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Chloroethane	ND	2.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Chloroform	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Chloromethane	ND	3.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
2-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
4-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
cis-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Dibromochloromethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Dibromomethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,1-Dichloroethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,1-Dichloroethene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,3-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
2,2-Dichloropropane	ND	2.0		µg/L	1	2/11/2015 7:32:28 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:35:00 AM
Lab ID: 1502279-002
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Hexachlorobutadiene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
2-Hexanone	ND	10		µg/L	1	2/11/2015 7:32:28 PM	R24238
Isopropylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
4-Isopropyltoluene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
4-Methyl-2-pentanone	ND	10		µg/L	1	2/11/2015 7:32:28 PM	R24238
Methylene Chloride	ND	3.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
n-Butylbenzene	ND	3.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
n-Propylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
sec-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Styrene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
tert-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Tetrachloroethene (PCE)	16	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
trans-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Trichlorofluoromethane	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Vinyl chloride	ND	1.0		µg/L	1	2/11/2015 7:32:28 PM	R24238
Xylenes, Total	ND	1.5		µg/L	1	2/11/2015 7:32:28 PM	R24238
Surr: 1,2-Dichloroethane-d4	85.6	70-130		%REC	1	2/11/2015 7:32:28 PM	R24238
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	1	2/11/2015 7:32:28 PM	R24238
Surr: Dibromofluoromethane	88.4	70-130		%REC	1	2/11/2015 7:32:28 PM	R24238
Surr: Toluene-d8	96.4	70-130		%REC	1	2/11/2015 7:32:28 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:38:00 AM
Lab ID: 1502279-003
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Toluene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Ethylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Naphthalene	ND	2.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
2-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Acetone	ND	10		µg/L	1	2/11/2015 8:00:52 PM	R24238
Bromobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Bromodichloromethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Bromoform	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Bromomethane	ND	3.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
2-Butanone	ND	10		µg/L	1	2/11/2015 8:00:52 PM	R24238
Carbon disulfide	ND	10		µg/L	1	2/11/2015 8:00:52 PM	R24238
Carbon Tetrachloride	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Chlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Chloroethane	ND	2.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Chloroform	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Chloromethane	ND	3.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
2-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
4-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
cis-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Dibromochloromethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Dibromomethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,1-Dichloroethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,1-Dichloroethene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,3-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
2,2-Dichloropropane	ND	2.0		µg/L	1	2/11/2015 8:00:52 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:38:00 AM
Lab ID: 1502279-003
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Hexachlorobutadiene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
2-Hexanone	ND	10		µg/L	1	2/11/2015 8:00:52 PM	R24238
Isopropylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
4-Isopropyltoluene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
4-Methyl-2-pentanone	ND	10		µg/L	1	2/11/2015 8:00:52 PM	R24238
Methylene Chloride	ND	3.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
n-Butylbenzene	ND	3.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
n-Propylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
sec-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Styrene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
tert-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Tetrachloroethene (PCE)	14	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
trans-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Trichlorofluoromethane	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Vinyl chloride	ND	1.0		µg/L	1	2/11/2015 8:00:52 PM	R24238
Xylenes, Total	ND	1.5		µg/L	1	2/11/2015 8:00:52 PM	R24238
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%REC	1	2/11/2015 8:00:52 PM	R24238
Surr: 4-Bromofluorobenzene	90.7	70-130		%REC	1	2/11/2015 8:00:52 PM	R24238
Surr: Dibromofluoromethane	88.5	70-130		%REC	1	2/11/2015 8:00:52 PM	R24238
Surr: Toluene-d8	94.4	70-130		%REC	1	2/11/2015 8:00:52 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150205DUPE
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:39:00 AM
Lab ID: 1502279-004
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Toluene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Ethylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Naphthalene	ND	2.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
2-Methylnaphthalene	ND	4.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Acetone	ND	10		µg/L	1	2/11/2015 8:29:10 PM	R24238
Bromobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Bromodichloromethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Bromoform	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Bromomethane	ND	3.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
2-Butanone	ND	10		µg/L	1	2/11/2015 8:29:10 PM	R24238
Carbon disulfide	ND	10		µg/L	1	2/11/2015 8:29:10 PM	R24238
Carbon Tetrachloride	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Chlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Chloroethane	ND	2.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Chloroform	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Chloromethane	ND	3.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
2-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
4-Chlorotoluene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
cis-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Dibromochloromethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Dibromomethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,1-Dichloroethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,1-Dichloroethene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,3-Dichloropropane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
2,2-Dichloropropane	ND	2.0		µg/L	1	2/11/2015 8:29:10 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150205DUPE
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:39:00 AM
Lab ID: 1502279-004
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Hexachlorobutadiene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
2-Hexanone	ND	10		µg/L	1	2/11/2015 8:29:10 PM	R24238
Isopropylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
4-Isopropyltoluene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
4-Methyl-2-pentanone	ND	10		µg/L	1	2/11/2015 8:29:10 PM	R24238
Methylene Chloride	ND	3.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
n-Butylbenzene	ND	3.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
n-Propylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
sec-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Styrene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
tert-Butylbenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Tetrachloroethene (PCE)	13	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
trans-1,2-DCE	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Trichlorofluoromethane	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Vinyl chloride	ND	1.0		µg/L	1	2/11/2015 8:29:10 PM	R24238
Xylenes, Total	ND	1.5		µg/L	1	2/11/2015 8:29:10 PM	R24238
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	2/11/2015 8:29:10 PM	R24238
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	1	2/11/2015 8:29:10 PM	R24238
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	2/11/2015 8:29:10 PM	R24238
Surr: Toluene-d8	92.0	70-130		%REC	1	2/11/2015 8:29:10 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:45:00 AM
Lab ID: 1502279-005
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Toluene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Ethylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Naphthalene	ND	2.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
2-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Acetone	ND	10		µg/L	1	2/16/2015 5:07:30 PM	R24334
Bromobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Bromodichloromethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Bromoform	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Bromomethane	ND	3.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
2-Butanone	ND	10		µg/L	1	2/16/2015 5:07:30 PM	R24334
Carbon disulfide	ND	10		µg/L	1	2/16/2015 5:07:30 PM	R24334
Carbon Tetrachloride	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Chlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Chloroethane	ND	2.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Chloroform	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Chloromethane	ND	3.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
2-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
4-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
cis-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Dibromochloromethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Dibromomethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,1-Dichloroethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,1-Dichloroethene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,3-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
2,2-Dichloropropane	ND	2.0		µg/L	1	2/16/2015 5:07:30 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:45:00 AM
Lab ID: 1502279-005
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Hexachlorobutadiene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
2-Hexanone	ND	10		µg/L	1	2/16/2015 5:07:30 PM	R24334
Isopropylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
4-Isopropyltoluene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
4-Methyl-2-pentanone	ND	10		µg/L	1	2/16/2015 5:07:30 PM	R24334
Methylene Chloride	ND	3.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
n-Butylbenzene	ND	3.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
n-Propylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
sec-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Styrene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
tert-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
trans-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Trichlorofluoromethane	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Vinyl chloride	ND	1.0		µg/L	1	2/16/2015 5:07:30 PM	R24334
Xylenes, Total	ND	1.5		µg/L	1	2/16/2015 5:07:30 PM	R24334
Surr: 1,2-Dichloroethane-d4	123	70-130		%REC	1	2/16/2015 5:07:30 PM	R24334
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	1	2/16/2015 5:07:30 PM	R24334
Surr: Dibromofluoromethane	127	70-130		%REC	1	2/16/2015 5:07:30 PM	R24334
Surr: Toluene-d8	121	70-130		%REC	1	2/16/2015 5:07:30 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:54:00 AM
Lab ID: 1502279-006
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Toluene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Ethylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Naphthalene	ND	2.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
2-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Acetone	ND	10		µg/L	1	2/16/2015 5:36:03 PM	R24334
Bromobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Bromodichloromethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Bromoform	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Bromomethane	ND	3.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
2-Butanone	ND	10		µg/L	1	2/16/2015 5:36:03 PM	R24334
Carbon disulfide	ND	10		µg/L	1	2/16/2015 5:36:03 PM	R24334
Carbon Tetrachloride	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Chlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Chloroethane	ND	2.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Chloroform	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Chloromethane	ND	3.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
2-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
4-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
cis-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Dibromochloromethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Dibromomethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,1-Dichloroethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,1-Dichloroethene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,3-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
2,2-Dichloropropane	ND	2.0		µg/L	1	2/16/2015 5:36:03 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:54:00 AM
Lab ID: 1502279-006
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Hexachlorobutadiene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
2-Hexanone	ND	10		µg/L	1	2/16/2015 5:36:03 PM	R24334
Isopropylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
4-Isopropyltoluene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
4-Methyl-2-pentanone	ND	10		µg/L	1	2/16/2015 5:36:03 PM	R24334
Methylene Chloride	ND	3.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
n-Butylbenzene	ND	3.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
n-Propylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
sec-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Styrene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
tert-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
trans-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Trichlorofluoromethane	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Vinyl chloride	ND	1.0		µg/L	1	2/16/2015 5:36:03 PM	R24334
Xylenes, Total	ND	1.5		µg/L	1	2/16/2015 5:36:03 PM	R24334
Surr: 1,2-Dichloroethane-d4	109	70-130		%REC	1	2/16/2015 5:36:03 PM	R24334
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	2/16/2015 5:36:03 PM	R24334
Surr: Dibromofluoromethane	111	70-130		%REC	1	2/16/2015 5:36:03 PM	R24334
Surr: Toluene-d8	107	70-130		%REC	1	2/16/2015 5:36:03 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:57:00 AM
Lab ID: 1502279-007
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Toluene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Ethylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Naphthalene	ND	2.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
2-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Acetone	ND	10		µg/L	1	2/16/2015 6:04:48 PM	R24334
Bromobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Bromodichloromethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Bromoform	12	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Bromomethane	ND	3.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
2-Butanone	ND	10		µg/L	1	2/16/2015 6:04:48 PM	R24334
Carbon disulfide	ND	10		µg/L	1	2/16/2015 6:04:48 PM	R24334
Carbon Tetrachloride	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Chlorobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Chloroethane	ND	2.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Chloroform	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Chloromethane	ND	3.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
2-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
4-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
cis-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Dibromochloromethane	3.4	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Dibromomethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,1-Dichloroethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,1-Dichloroethene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,3-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
2,2-Dichloropropane	ND	2.0		µg/L	1	2/16/2015 6:04:48 PM	R24334

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 9:57:00 AM
Lab ID: 1502279-007
Matrix: AQUEOUS
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Hexachlorobutadiene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
2-Hexanone	ND	10		µg/L	1	2/16/2015 6:04:48 PM	R24334
Isopropylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
4-Isopropyltoluene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
4-Methyl-2-pentanone	ND	10		µg/L	1	2/16/2015 6:04:48 PM	R24334
Methylene Chloride	ND	3.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
n-Butylbenzene	ND	3.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
n-Propylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
sec-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Styrene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
tert-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
trans-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Trichlorofluoromethane	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Vinyl chloride	ND	1.0		µg/L	1	2/16/2015 6:04:48 PM	R24334
Xylenes, Total	ND	1.5		µg/L	1	2/16/2015 6:04:48 PM	R24334
Surr: 1,2-Dichloroethane-d4	115	70-130		%REC	1	2/16/2015 6:04:48 PM	R24334
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	2/16/2015 6:04:48 PM	R24334
Surr: Dibromofluoromethane	120	70-130		%REC	1	2/16/2015 6:04:48 PM	R24334
Surr: Toluene-d8	115	70-130		%REC	1	2/16/2015 6:04:48 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund Process Center Monthly
Collection Date:
Lab ID: 1502279-008
Matrix: TRIP BLANK
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Toluene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Ethylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Naphthalene	ND	2.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
2-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Acetone	ND	10		µg/L	1	2/16/2015 1:17:33 PM	R24334
Bromobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Bromodichloromethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Bromoform	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Bromomethane	ND	3.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
2-Butanone	ND	10		µg/L	1	2/16/2015 1:17:33 PM	R24334
Carbon disulfide	ND	10		µg/L	1	2/16/2015 1:17:33 PM	R24334
Carbon Tetrachloride	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Chlorobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Chloroethane	ND	2.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Chloroform	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Chloromethane	ND	3.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
2-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
4-Chlorotoluene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
cis-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Dibromochloromethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Dibromomethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,1-Dichloroethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,1-Dichloroethene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,3-Dichloropropane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
2,2-Dichloropropane	ND	2.0		µg/L	1	2/16/2015 1:17:33 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund Process Center Monthly
Collection Date:
Lab ID: 1502279-008
Matrix: TRIP BLANK
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Hexachlorobutadiene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
2-Hexanone	ND	10		µg/L	1	2/16/2015 1:17:33 PM	R24334
Isopropylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
4-Isopropyltoluene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
4-Methyl-2-pentanone	ND	10		µg/L	1	2/16/2015 1:17:33 PM	R24334
Methylene Chloride	ND	3.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
n-Butylbenzene	ND	3.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
n-Propylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
sec-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Styrene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
tert-Butylbenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
trans-1,2-DCE	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Trichlorofluoromethane	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Vinyl chloride	ND	1.0		µg/L	1	2/16/2015 1:17:33 PM	R24334
Xylenes, Total	ND	1.5		µg/L	1	2/16/2015 1:17:33 PM	R24334
Surr: 1,2-Dichloroethane-d4	113	70-130		%REC	1	2/16/2015 1:17:33 PM	R24334
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	2/16/2015 1:17:33 PM	R24334
Surr: Dibromofluoromethane	114	70-130		%REC	1	2/16/2015 1:17:33 PM	R24334
Surr: Toluene-d8	121	70-130		%REC	1	2/16/2015 1:17:33 PM	R24334

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1502279**
17-Feb-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly Sample

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24238**	RunNo: **24238**			
Prep Date:	Analysis Date: **2/11/2015**	SeqNo: **714512**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1502279**
17-Feb-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly Sample

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24238** RunNo: **24238**
Prep Date: Analysis Date: **2/11/2015** SeqNo: **714512** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.9	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.7	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24238** RunNo: **24238**
Prep Date: Analysis Date: **2/11/2015** SeqNo: **714514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	19	1.0	20.00	0	96.8	70	130			
Chlorobenzene	19	1.0	20.00	0	97.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1502279**
17-Feb-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly Sample

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24238** RunNo: **24238**
Prep Date: Analysis Date: **2/11/2015** SeqNo: **714514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	108	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	8.8		10.00		88.1	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24334** RunNo: **24334**
Prep Date: Analysis Date: **2/16/2015** SeqNo: **717099** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1502279**
17-Feb-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly Sample

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24334**	RunNo: **24334**			
Prep Date:	Analysis Date: **2/16/2015**	SeqNo: **717099**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1502279**
17-Feb-15

Client: City of Las Cruces
Project: Joint Superfund Process Center Monthly Sample

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24334**	RunNo: **24334**			
Prep Date:	Analysis Date: **2/16/2015**	SeqNo: **717099**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R24334**	RunNo: **24334**			
Prep Date:	Analysis Date: **2/16/2015**	SeqNo: **717101**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	26	1.0	20.00	0	129	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	92.7	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1502279 RcptNo: 1

Received by/date: LM 02/06/15

Logged By: **Ashley Gallegos** 2/6/2015 8:50:00 AM AG

Completed By: **Ashley Gallegos** 2/6/2015 11:18:01 AM AG

Reviewed By: IO 02/06/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT Superfund Process Center - Monthly Samples

Project #: "GRIGGS-WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 7.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1502279	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
2/5/15	9:14	Drink H_2O	CLC27-150205	3-40ml	$HgCl_2$	-001										X						
	9:35	Drink H_2O	CLC18-150205	3-40ml	$HgCl_2$	-002										X						
	9:38	Drink H_2O	IS1-150205	3-40ml	$HgCl_2$	-003										X						
	9:39	Drink H_2O	IS1-150205 DUPE	3-40ml	$HgCl_2$	-004										X						
	9:45	Drink H_2O	C1-150205	3-40ml	$HgCl_2$	-005										X						
	9:54	Drink H_2O	C2-150205	3-40ml	$HgCl_2$	-006										X						
2/5/15	9:57	Drink H_2O	ES1-150205	3-40ml	$HgCl_2$	-007										X						
2/5/15	UNK	LAB H_2O	TRIP BLANK	2-40ml	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/5/15	1315	Laura Montoya	[signature]	02/06/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to
Luis Guerra c/o City of Las Cruces

This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 13, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center Monthly GAS OrderNo.: 1502280

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/6/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1502280**
Date Reported: **2/13/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 10:02:00 AM
Lab ID: 1502280-001
Matrix: AIR
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Toluene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Ethylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Naphthalene	ND	0.20		µg/L	1	2/11/2015 12:23:56 PM	R24238
1-Methylnaphthalene	ND	0.40		µg/L	1	2/11/2015 12:23:56 PM	R24238
2-Methylnaphthalene	ND	0.40		µg/L	1	2/11/2015 12:23:56 PM	R24238
Acetone	ND	1.0		µg/L	1	2/11/2015 12:23:56 PM	R24238
Bromobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Bromodichloromethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Bromoform	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Bromomethane	ND	0.20		µg/L	1	2/11/2015 12:23:56 PM	R24238
2-Butanone	ND	1.0		µg/L	1	2/11/2015 12:23:56 PM	R24238
Carbon disulfide	ND	1.0		µg/L	1	2/11/2015 12:23:56 PM	R24238
Carbon tetrachloride	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Chlorobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Chloroethane	ND	0.20		µg/L	1	2/11/2015 12:23:56 PM	R24238
Chloroform	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Chloromethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
2-Chlorotoluene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
4-Chlorotoluene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
cis-1,2-DCE	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	2/11/2015 12:23:56 PM	R24238
Dibromochloromethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Dibromomethane	ND	0.20		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2-Dichlorobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,3-Dichlorobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,4-Dichlorobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Dichlorodifluoromethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,1-Dichloroethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,1-Dichloroethene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2-Dichloropropane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,3-Dichloropropane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
2,2-Dichloropropane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 10:02:00 AM
Lab ID: 1502280-001
Matrix: AIR
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Hexachlorobutadiene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
2-Hexanone	ND	1.0		µg/L	1	2/11/2015 12:23:56 PM	R24238
Isopropylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
4-Isopropyltoluene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
4-Methyl-2-pentanone	ND	1.0		µg/L	1	2/11/2015 12:23:56 PM	R24238
Methylene chloride	ND	0.30		µg/L	1	2/11/2015 12:23:56 PM	R24238
n-Butylbenzene	ND	0.30		µg/L	1	2/11/2015 12:23:56 PM	R24238
n-Propylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
sec-Butylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Styrene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
tert-Butylbenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
trans-1,2-DCE	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,1,1-Trichloroethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,1,2-Trichloroethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Trichloroethene (TCE)	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Trichlorofluoromethane	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
1,2,3-Trichloropropane	ND	0.20		µg/L	1	2/11/2015 12:23:56 PM	R24238
Vinyl chloride	ND	0.10		µg/L	1	2/11/2015 12:23:56 PM	R24238
Xylenes, Total	ND	0.15		µg/L	1	2/11/2015 12:23:56 PM	R24238
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	2/11/2015 12:23:56 PM	R24238
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	2/11/2015 12:23:56 PM	R24238
Surr: Toluene-d8	93.0	70-130		%REC	1	2/11/2015 12:23:56 PM	R24238
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	2/11/2015 12:23:56 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 10:04:00 AM
Lab ID: 1502280-002
Matrix: AIR
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Toluene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Ethylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Naphthalene	ND	0.20		µg/L	1	2/11/2015 1:49:48 PM	R24238
1-Methylnaphthalene	ND	0.40		µg/L	1	2/11/2015 1:49:48 PM	R24238
2-Methylnaphthalene	ND	0.40		µg/L	1	2/11/2015 1:49:48 PM	R24238
Acetone	ND	1.0		µg/L	1	2/11/2015 1:49:48 PM	R24238
Bromobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Bromodichloromethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Bromoform	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Bromomethane	ND	0.20		µg/L	1	2/11/2015 1:49:48 PM	R24238
2-Butanone	ND	1.0		µg/L	1	2/11/2015 1:49:48 PM	R24238
Carbon disulfide	ND	1.0		µg/L	1	2/11/2015 1:49:48 PM	R24238
Carbon tetrachloride	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Chlorobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Chloroethane	ND	0.20		µg/L	1	2/11/2015 1:49:48 PM	R24238
Chloroform	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Chloromethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
2-Chlorotoluene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
4-Chlorotoluene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
cis-1,2-DCE	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	2/11/2015 1:49:48 PM	R24238
Dibromochloromethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Dibromomethane	ND	0.20		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2-Dichlorobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,3-Dichlorobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,4-Dichlorobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Dichlorodifluoromethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,1-Dichloroethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,1-Dichloroethene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2-Dichloropropane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,3-Dichloropropane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
2,2-Dichloropropane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150205
Project: Joint Superfund Process Center Monthly
Collection Date: 2/5/2015 10:04:00 AM
Lab ID: 1502280-002
Matrix: AIR
Received Date: 2/6/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Hexachlorobutadiene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
2-Hexanone	ND	1.0		µg/L	1	2/11/2015 1:49:48 PM	R24238
Isopropylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
4-Isopropyltoluene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
4-Methyl-2-pentanone	ND	1.0		µg/L	1	2/11/2015 1:49:48 PM	R24238
Methylene chloride	ND	0.30		µg/L	1	2/11/2015 1:49:48 PM	R24238
n-Butylbenzene	ND	0.30		µg/L	1	2/11/2015 1:49:48 PM	R24238
n-Propylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
sec-Butylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Styrene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
tert-Butylbenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
trans-1,2-DCE	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,1,1-Trichloroethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,1,2-Trichloroethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Trichloroethene (TCE)	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Trichlorofluoromethane	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
1,2,3-Trichloropropane	ND	0.20		µg/L	1	2/11/2015 1:49:48 PM	R24238
Vinyl chloride	ND	0.10		µg/L	1	2/11/2015 1:49:48 PM	R24238
Xylenes, Total	ND	0.15		µg/L	1	2/11/2015 1:49:48 PM	R24238
Surr: Dibromofluoromethane	95.8	70-130		%REC	1	2/11/2015 1:49:48 PM	R24238
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	2/11/2015 1:49:48 PM	R24238
Surr: Toluene-d8	89.1	70-130		%REC	1	2/11/2015 1:49:48 PM	R24238
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	1	2/11/2015 1:49:48 PM	R24238

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1502280 RcptNo: 1

Received by/date: LM 02/06/15

Logged By: **Ashley Gallegos** 2/6/2015 8:50:00 AM AG

Completed By: **Ashley Gallegos** 2/6/2015 11:26:17 AM AG

Reviewed By: IO 02/06/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT SUPERFUND ProcessCenter-Monthly GAS

Project #: "GR1665-WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1502280	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
2/5/15	1002	AIR	AS1-150205	1 TEDLAR BAG	NONE	-001										X						
2/5/15	1004	AIR	AS2-150205	1 TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/5/15	1330	Laura Montoya		02/06/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to
Luis Guerra c/o City of Las Cr

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 06, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1503124

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/4/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503124**
Date Reported: **3/6/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:49:00 AM
Lab ID: 1503124-001
Matrix: AIR
Received Date: 3/4/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Toluene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Ethylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Naphthalene	ND	0.20		µg/L	1	3/5/2015 11:19:55 AM	R24663
1-Methylnaphthalene	ND	0.40		µg/L	1	3/5/2015 11:19:55 AM	R24663
2-Methylnaphthalene	ND	0.40		µg/L	1	3/5/2015 11:19:55 AM	R24663
Acetone	ND	1.0		µg/L	1	3/5/2015 11:19:55 AM	R24663
Bromobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Bromodichloromethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Bromoform	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Bromomethane	ND	0.20		µg/L	1	3/5/2015 11:19:55 AM	R24663
2-Butanone	ND	1.0		µg/L	1	3/5/2015 11:19:55 AM	R24663
Carbon disulfide	ND	1.0		µg/L	1	3/5/2015 11:19:55 AM	R24663
Carbon tetrachloride	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Chlorobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Chloroethane	ND	0.20		µg/L	1	3/5/2015 11:19:55 AM	R24663
Chloroform	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Chloromethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
2-Chlorotoluene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
4-Chlorotoluene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
cis-1,2-DCE	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	3/5/2015 11:19:55 AM	R24663
Dibromochloromethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Dibromomethane	ND	0.20		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2-Dichlorobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,3-Dichlorobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,4-Dichlorobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Dichlorodifluoromethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,1-Dichloroethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,1-Dichloroethene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2-Dichloropropane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,3-Dichloropropane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
2,2-Dichloropropane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:49:00 AM
Lab ID: 1503124-001
Matrix: AIR
Received Date: 3/4/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Hexachlorobutadiene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
2-Hexanone	ND	1.0		µg/L	1	3/5/2015 11:19:55 AM	R24663
Isopropylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
4-Isopropyltoluene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
4-Methyl-2-pentanone	ND	1.0		µg/L	1	3/5/2015 11:19:55 AM	R24663
Methylene chloride	ND	0.30		µg/L	1	3/5/2015 11:19:55 AM	R24663
n-Butylbenzene	ND	0.30		µg/L	1	3/5/2015 11:19:55 AM	R24663
n-Propylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
sec-Butylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Styrene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
tert-Butylbenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Tetrachloroethene (PCE)	0.15	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
trans-1,2-DCE	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,1,1-Trichloroethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,1,2-Trichloroethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Trichloroethene (TCE)	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Trichlorofluoromethane	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
1,2,3-Trichloropropane	ND	0.20		µg/L	1	3/5/2015 11:19:55 AM	R24663
Vinyl chloride	ND	0.10		µg/L	1	3/5/2015 11:19:55 AM	R24663
Xylenes, Total	ND	0.15		µg/L	1	3/5/2015 11:19:55 AM	R24663
Surr: Dibromofluoromethane	94.8	70-130		%REC	1	3/5/2015 11:19:55 AM	R24663
Surr: 1,2-Dichloroethane-d4	84.2	70-130		%REC	1	3/5/2015 11:19:55 AM	R24663
Surr: Toluene-d8	94.8	70-130		%REC	1	3/5/2015 11:19:55 AM	R24663
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	1	3/5/2015 11:19:55 AM	R24663

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:52:00 AM
Lab ID: 1503124-002
Matrix: AIR
Received Date: 3/4/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Toluene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Ethylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Naphthalene	ND	0.20		µg/L	1	3/5/2015 12:14:58 PM	R24663
1-Methylnaphthalene	ND	0.40		µg/L	1	3/5/2015 12:14:58 PM	R24663
2-Methylnaphthalene	ND	0.40		µg/L	1	3/5/2015 12:14:58 PM	R24663
Acetone	ND	1.0		µg/L	1	3/5/2015 12:14:58 PM	R24663
Bromobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Bromodichloromethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Bromoform	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Bromomethane	ND	0.20		µg/L	1	3/5/2015 12:14:58 PM	R24663
2-Butanone	ND	1.0		µg/L	1	3/5/2015 12:14:58 PM	R24663
Carbon disulfide	ND	1.0		µg/L	1	3/5/2015 12:14:58 PM	R24663
Carbon tetrachloride	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Chlorobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Chloroethane	ND	0.20		µg/L	1	3/5/2015 12:14:58 PM	R24663
Chloroform	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Chloromethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
2-Chlorotoluene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
4-Chlorotoluene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
cis-1,2-DCE	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	3/5/2015 12:14:58 PM	R24663
Dibromochloromethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Dibromomethane	ND	0.20		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2-Dichlorobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,3-Dichlorobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,4-Dichlorobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Dichlorodifluoromethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,1-Dichloroethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,1-Dichloroethene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2-Dichloropropane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,3-Dichloropropane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
2,2-Dichloropropane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:52:00 AM
Lab ID: 1503124-002
Matrix: AIR
Received Date: 3/4/2015 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Hexachlorobutadiene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
2-Hexanone	ND	1.0		µg/L	1	3/5/2015 12:14:58 PM	R24663
Isopropylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
4-Isopropyltoluene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
4-Methyl-2-pentanone	ND	1.0		µg/L	1	3/5/2015 12:14:58 PM	R24663
Methylene chloride	ND	0.30		µg/L	1	3/5/2015 12:14:58 PM	R24663
n-Butylbenzene	ND	0.30		µg/L	1	3/5/2015 12:14:58 PM	R24663
n-Propylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
sec-Butylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Styrene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
tert-Butylbenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Tetrachloroethene (PCE)	0.14	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
trans-1,2-DCE	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,1,1-Trichloroethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,1,2-Trichloroethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Trichloroethene (TCE)	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Trichlorofluoromethane	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
1,2,3-Trichloropropane	ND	0.20		µg/L	1	3/5/2015 12:14:58 PM	R24663
Vinyl chloride	ND	0.10		µg/L	1	3/5/2015 12:14:58 PM	R24663
Xylenes, Total	ND	0.15		µg/L	1	3/5/2015 12:14:58 PM	R24663
Surr: Dibromofluoromethane	97.5	70-130		%REC	1	3/5/2015 12:14:58 PM	R24663
Surr: 1,2-Dichloroethane-d4	88.4	70-130		%REC	1	3/5/2015 12:14:58 PM	R24663
Surr: Toluene-d8	95.0	70-130		%REC	1	3/5/2015 12:14:58 PM	R24663
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	3/5/2015 12:14:58 PM	R24663

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1503124 RcptNo: 1

Received by/date: AT 03/04/15

Logged By: Anne Thorne 3/4/2015 9:40:00 AM Anne Thorne

Completed By: Anne Thorne 3/4/2015 Anne Thorne

Reviewed By: 03/04/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? UPS

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Chain-of-Custody Record

ent: City of Las Cruces

iling Address: P.O. Box 20000
Las Cruces, NM 88004

one #: 575-528-3609

ail or Fax#: 575-528-3630

/QC Package:
Standard ☐ Level 4 (Full Validation)

creditation
NELAP ☐ Other _____

EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT SUPERFUND Process Center-Monthly Samples

Project #: "GR166S-WALNUT"

Project Manager: LUIS GUERRA
lguerra@las-cruces.org

Sampler: Laura Mondoya

On Ice: ☐ Yes ☐ No

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503124	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
/15	9:49	AIR	AS1-150303	1 TEDLAR BAG	NONE	-001										X						
/15	9:52	AIR	AS2-150303	1 TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
/15	1400	Laura Mondoya	[signature]	03/04/15	0940
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to LUIS GUERRA
Send invoice to:
Luis Guerra % City of Las Cruces

All services performed are subject to our standard terms and conditions. Any deviations from standard procedures and data will be clearly noted on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 09, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1503147

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/4/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503147**
Date Reported: **3/9/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:18:00 AM
Lab ID: 1503147-001
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Toluene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Ethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Naphthalene	ND	2.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
2-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Acetone	ND	10		µg/L	1	3/6/2015 12:50:50 PM	R24691
Bromobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Bromodichloromethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Bromoform	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Bromomethane	ND	3.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
2-Butanone	ND	10		µg/L	1	3/6/2015 12:50:50 PM	R24691
Carbon disulfide	ND	10		µg/L	1	3/6/2015 12:50:50 PM	R24691
Carbon Tetrachloride	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Chlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Chloroethane	ND	2.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Chloroform	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Chloromethane	ND	3.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
2-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
4-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
cis-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Dibromochloromethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Dibromomethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,1-Dichloroethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,1-Dichloroethene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,3-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
2,2-Dichloropropane	ND	2.0		µg/L	1	3/6/2015 12:50:50 PM	R24691

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:18:00 AM
Lab ID: 1503147-001
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Hexachlorobutadiene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
2-Hexanone	ND	10		µg/L	1	3/6/2015 12:50:50 PM	R24691
Isopropylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
4-Isopropyltoluene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
4-Methyl-2-pentanone	ND	10		µg/L	1	3/6/2015 12:50:50 PM	R24691
Methylene Chloride	ND	3.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
n-Butylbenzene	ND	3.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
n-Propylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
sec-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Styrene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
tert-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Tetrachloroethene (PCE)	12	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
trans-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Trichlorofluoromethane	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Vinyl chloride	ND	1.0		µg/L	1	3/6/2015 12:50:50 PM	R24691
Xylenes, Total	ND	1.5		µg/L	1	3/6/2015 12:50:50 PM	R24691
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	3/6/2015 12:50:50 PM	R24691
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/6/2015 12:50:50 PM	R24691
Surr: Dibromofluoromethane	97.6	70-130		%REC	1	3/6/2015 12:50:50 PM	R24691
Surr: Toluene-d8	97.0	70-130		%REC	1	3/6/2015 12:50:50 PM	R24691

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:30:00 AM
Lab ID: 1503147-002
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Toluene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Ethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Naphthalene	ND	2.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
2-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Acetone	ND	10		µg/L	1	3/6/2015 1:19:43 PM	R24691
Bromobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Bromodichloromethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Bromoform	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Bromomethane	ND	3.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
2-Butanone	ND	10		µg/L	1	3/6/2015 1:19:43 PM	R24691
Carbon disulfide	ND	10		µg/L	1	3/6/2015 1:19:43 PM	R24691
Carbon Tetrachloride	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Chlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Chloroethane	ND	2.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Chloroform	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Chloromethane	ND	3.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
2-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
4-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
cis-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Dibromochloromethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Dibromomethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,1-Dichloroethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,1-Dichloroethene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,3-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
2,2-Dichloropropane	ND	2.0		µg/L	1	3/6/2015 1:19:43 PM	R24691

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:30:00 AM
Lab ID: 1503147-002
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Hexachlorobutadiene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
2-Hexanone	ND	10		µg/L	1	3/6/2015 1:19:43 PM	R24691
Isopropylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
4-Isopropyltoluene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
4-Methyl-2-pentanone	ND	10		µg/L	1	3/6/2015 1:19:43 PM	R24691
Methylene Chloride	ND	3.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
n-Butylbenzene	ND	3.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
n-Propylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
sec-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Styrene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
tert-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Tetrachloroethene (PCE)	18	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
trans-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Trichlorofluoromethane	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Vinyl chloride	ND	1.0		µg/L	1	3/6/2015 1:19:43 PM	R24691
Xylenes, Total	ND	1.5		µg/L	1	3/6/2015 1:19:43 PM	R24691
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	3/6/2015 1:19:43 PM	R24691
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	1	3/6/2015 1:19:43 PM	R24691
Surr: Dibromofluoromethane	93.3	70-130		%REC	1	3/6/2015 1:19:43 PM	R24691
Surr: Toluene-d8	97.7	70-130		%REC	1	3/6/2015 1:19:43 PM	R24691

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:35:00 AM
Lab ID: 1503147-003
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Toluene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Ethylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Naphthalene	ND	2.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1-Methylnaphthalene	ND	4.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
2-Methylnaphthalene	ND	4.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Acetone	ND	10		µg/L	1	3/5/2015 11:19:11 PM	R24660
Bromobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Bromodichloromethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Bromoform	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Bromomethane	ND	3.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
2-Butanone	ND	10		µg/L	1	3/5/2015 11:19:11 PM	R24660
Carbon disulfide	ND	10		µg/L	1	3/5/2015 11:19:11 PM	R24660
Carbon Tetrachloride	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Chlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Chloroethane	ND	2.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Chloroform	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Chloromethane	ND	3.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
2-Chlorotoluene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
4-Chlorotoluene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
cis-1,2-DCE	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Dibromochloromethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Dibromomethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,1-Dichloroethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,1-Dichloroethene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2-Dichloropropane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,3-Dichloropropane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
2,2-Dichloropropane	ND	2.0		µg/L	1	3/5/2015 11:19:11 PM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:35:00 AM
Lab ID: 1503147-003
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Hexachlorobutadiene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
2-Hexanone	ND	10		µg/L	1	3/5/2015 11:19:11 PM	R24660
Isopropylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
4-Isopropyltoluene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
4-Methyl-2-pentanone	ND	10		µg/L	1	3/5/2015 11:19:11 PM	R24660
Methylene Chloride	ND	3.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
n-Butylbenzene	ND	3.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
n-Propylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
sec-Butylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Styrene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
tert-Butylbenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Tetrachloroethene (PCE)	13	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
trans-1,2-DCE	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Trichlorofluoromethane	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Vinyl chloride	ND	1.0		µg/L	1	3/5/2015 11:19:11 PM	R24660
Xylenes, Total	ND	1.5		µg/L	1	3/5/2015 11:19:11 PM	R24660
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	1	3/5/2015 11:19:11 PM	R24660
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/5/2015 11:19:11 PM	R24660
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	3/5/2015 11:19:11 PM	R24660
Surr: Toluene-d8	98.9	70-130		%REC	1	3/5/2015 11:19:11 PM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150303 DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:36:00 AM
Lab ID: 1503147-004
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Toluene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Ethylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Naphthalene	ND	2.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1-Methylnaphthalene	ND	4.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
2-Methylnaphthalene	ND	4.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Acetone	ND	10		µg/L	1	3/5/2015 11:47:53 PM	R24660
Bromobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Bromodichloromethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Bromoform	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Bromomethane	ND	3.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
2-Butanone	ND	10		µg/L	1	3/5/2015 11:47:53 PM	R24660
Carbon disulfide	ND	10		µg/L	1	3/5/2015 11:47:53 PM	R24660
Carbon Tetrachloride	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Chlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Chloroethane	ND	2.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Chloroform	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Chloromethane	ND	3.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
2-Chlorotoluene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
4-Chlorotoluene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
cis-1,2-DCE	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Dibromochloromethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Dibromomethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,1-Dichloroethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,1-Dichloroethene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2-Dichloropropane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,3-Dichloropropane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
2,2-Dichloropropane	ND	2.0		µg/L	1	3/5/2015 11:47:53 PM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150303 DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:36:00 AM
Lab ID: 1503147-004
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Hexachlorobutadiene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
2-Hexanone	ND	10		µg/L	1	3/5/2015 11:47:53 PM	R24660
Isopropylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
4-Isopropyltoluene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
4-Methyl-2-pentanone	ND	10		µg/L	1	3/5/2015 11:47:53 PM	R24660
Methylene Chloride	ND	3.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
n-Butylbenzene	ND	3.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
n-Propylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
sec-Butylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Styrene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
tert-Butylbenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Tetrachloroethene (PCE)	12	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
trans-1,2-DCE	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Trichlorofluoromethane	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Vinyl chloride	ND	1.0		µg/L	1	3/5/2015 11:47:53 PM	R24660
Xylenes, Total	ND	1.5		µg/L	1	3/5/2015 11:47:53 PM	R24660
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	1	3/5/2015 11:47:53 PM	R24660
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/5/2015 11:47:53 PM	R24660
Surr: Dibromofluoromethane	95.1	70-130		%REC	1	3/5/2015 11:47:53 PM	R24660
Surr: Toluene-d8	98.3	70-130		%REC	1	3/5/2015 11:47:53 PM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:41:00 AM
Lab ID: 1503147-005
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Toluene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Ethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Naphthalene	ND	2.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
2-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Acetone	ND	10		µg/L	1	3/6/2015 12:16:37 AM	R24660
Bromobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Bromodichloromethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Bromoform	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Bromomethane	ND	3.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
2-Butanone	ND	10		µg/L	1	3/6/2015 12:16:37 AM	R24660
Carbon disulfide	ND	10		µg/L	1	3/6/2015 12:16:37 AM	R24660
Carbon Tetrachloride	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Chlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Chloroethane	ND	2.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Chloroform	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Chloromethane	ND	3.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
2-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
4-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
cis-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Dibromochloromethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Dibromomethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,1-Dichloroethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,1-Dichloroethene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,3-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
2,2-Dichloropropane	ND	2.0		µg/L	1	3/6/2015 12:16:37 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:41:00 AM
Lab ID: 1503147-005
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Hexachlorobutadiene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
2-Hexanone	ND	10		µg/L	1	3/6/2015 12:16:37 AM	R24660
Isopropylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
4-Isopropyltoluene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
4-Methyl-2-pentanone	ND	10		µg/L	1	3/6/2015 12:16:37 AM	R24660
Methylene Chloride	ND	3.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
n-Butylbenzene	ND	3.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
n-Propylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
sec-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Styrene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
tert-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
trans-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Trichlorofluoromethane	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Vinyl chloride	ND	1.0		µg/L	1	3/6/2015 12:16:37 AM	R24660
Xylenes, Total	ND	1.5		µg/L	1	3/6/2015 12:16:37 AM	R24660
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%REC	1	3/6/2015 12:16:37 AM	R24660
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	3/6/2015 12:16:37 AM	R24660
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	3/6/2015 12:16:37 AM	R24660
Surr: Toluene-d8	97.1	70-130		%REC	1	3/6/2015 12:16:37 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:45:00 AM
Lab ID: 1503147-006
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Toluene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Ethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Naphthalene	ND	2.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
2-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Acetone	ND	10		µg/L	1	3/6/2015 12:45:22 AM	R24660
Bromobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Bromodichloromethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Bromoform	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Bromomethane	ND	3.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
2-Butanone	ND	10		µg/L	1	3/6/2015 12:45:22 AM	R24660
Carbon disulfide	ND	10		µg/L	1	3/6/2015 12:45:22 AM	R24660
Carbon Tetrachloride	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Chlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Chloroethane	ND	2.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Chloroform	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Chloromethane	ND	3.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
2-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
4-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
cis-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Dibromochloromethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Dibromomethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,1-Dichloroethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,1-Dichloroethene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,3-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
2,2-Dichloropropane	ND	2.0		µg/L	1	3/6/2015 12:45:22 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:45:00 AM
Lab ID: 1503147-006
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Hexachlorobutadiene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
2-Hexanone	ND	10		µg/L	1	3/6/2015 12:45:22 AM	R24660
Isopropylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
4-Isopropyltoluene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
4-Methyl-2-pentanone	ND	10		µg/L	1	3/6/2015 12:45:22 AM	R24660
Methylene Chloride	ND	3.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
n-Butylbenzene	ND	3.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
n-Propylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
sec-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Styrene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
tert-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
trans-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Trichlorofluoromethane	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Vinyl chloride	ND	1.0		µg/L	1	3/6/2015 12:45:22 AM	R24660
Xylenes, Total	ND	1.5		µg/L	1	3/6/2015 12:45:22 AM	R24660
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	3/6/2015 12:45:22 AM	R24660
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/6/2015 12:45:22 AM	R24660
Surr: Dibromofluoromethane	86.1	70-130		%REC	1	3/6/2015 12:45:22 AM	R24660
Surr: Toluene-d8	98.6	70-130		%REC	1	3/6/2015 12:45:22 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:58:00 AM
Lab ID: 1503147-007
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Toluene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Ethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Naphthalene	ND	2.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
2-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Acetone	ND	10		µg/L	1	3/6/2015 1:14:04 AM	R24660
Bromobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Bromodichloromethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Bromoform	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Bromomethane	ND	3.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
2-Butanone	ND	10		µg/L	1	3/6/2015 1:14:04 AM	R24660
Carbon disulfide	ND	10		µg/L	1	3/6/2015 1:14:04 AM	R24660
Carbon Tetrachloride	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Chlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Chloroethane	ND	2.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Chloroform	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Chloromethane	ND	3.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
2-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
4-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
cis-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Dibromochloromethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Dibromomethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,1-Dichloroethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,1-Dichloroethene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,3-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
2,2-Dichloropropane	ND	2.0		µg/L	1	3/6/2015 1:14:04 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150303
Project: Joint Superfund Process Center-Monthly
Collection Date: 3/3/2015 9:58:00 AM
Lab ID: 1503147-007
Matrix: AQUEOUS
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Hexachlorobutadiene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
2-Hexanone	ND	10		µg/L	1	3/6/2015 1:14:04 AM	R24660
Isopropylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
4-Isopropyltoluene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
4-Methyl-2-pentanone	ND	10		µg/L	1	3/6/2015 1:14:04 AM	R24660
Methylene Chloride	ND	3.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
n-Butylbenzene	ND	3.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
n-Propylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
sec-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Styrene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
tert-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
trans-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Trichlorofluoromethane	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Vinyl chloride	ND	1.0		µg/L	1	3/6/2015 1:14:04 AM	R24660
Xylenes, Total	ND	1.5		µg/L	1	3/6/2015 1:14:04 AM	R24660
Surr: 1,2-Dichloroethane-d4	88.7	70-130		%REC	1	3/6/2015 1:14:04 AM	R24660
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/6/2015 1:14:04 AM	R24660
Surr: Dibromofluoromethane	91.6	70-130		%REC	1	3/6/2015 1:14:04 AM	R24660
Surr: Toluene-d8	97.4	70-130		%REC	1	3/6/2015 1:14:04 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Joint Superfund Process Center-Monthly
Collection Date:
Lab ID: 1503147-008
Matrix: TRIP BLANK
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Toluene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Ethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Naphthalene	ND	2.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
2-Methylnaphthalene	ND	4.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Acetone	ND	10		µg/L	1	3/6/2015 1:42:46 AM	R24660
Bromobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Bromodichloromethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Bromoform	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Bromomethane	ND	3.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
2-Butanone	ND	10		µg/L	1	3/6/2015 1:42:46 AM	R24660
Carbon disulfide	ND	10		µg/L	1	3/6/2015 1:42:46 AM	R24660
Carbon Tetrachloride	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Chlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Chloroethane	ND	2.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Chloroform	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Chloromethane	ND	3.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
2-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
4-Chlorotoluene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
cis-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Dibromochloromethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Dibromomethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,1-Dichloroethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,1-Dichloroethene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,3-Dichloropropane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
2,2-Dichloropropane	ND	2.0		µg/L	1	3/6/2015 1:42:46 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Joint Superfund Process Center-Monthly
Collection Date:
Lab ID: 1503147-008
Matrix: TRIP BLANK
Received Date: 3/4/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Hexachlorobutadiene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
2-Hexanone	ND	10		µg/L	1	3/6/2015 1:42:46 AM	R24660
Isopropylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
4-Isopropyltoluene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
4-Methyl-2-pentanone	ND	10		µg/L	1	3/6/2015 1:42:46 AM	R24660
Methylene Chloride	ND	3.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
n-Butylbenzene	ND	3.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
n-Propylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
sec-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Styrene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
tert-Butylbenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
trans-1,2-DCE	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Trichlorofluoromethane	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Vinyl chloride	ND	1.0		µg/L	1	3/6/2015 1:42:46 AM	R24660
Xylenes, Total	ND	1.5		µg/L	1	3/6/2015 1:42:46 AM	R24660
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	3/6/2015 1:42:46 AM	R24660
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/6/2015 1:42:46 AM	R24660
Surr: Dibromofluoromethane	101	70-130		%REC	1	3/6/2015 1:42:46 AM	R24660
Surr: Toluene-d8	99.1	70-130		%REC	1	3/6/2015 1:42:46 AM	R24660

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1503147**
09-Mar-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID	**5mL rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8260B: VOLATILES**		
Client ID:	**PBW**	Batch ID:	**R24660**	RunNo:	**24660**		
Prep Date:		Analysis Date:	**3/5/2015**	SeqNo:	**726648**	Units:	**µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1503147**
09-Mar-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24660** RunNo: **24660**
Prep Date: Analysis Date: **3/5/2015** SeqNo: **726648** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24660** RunNo: **24660**
Prep Date: Analysis Date: **3/5/2015** SeqNo: **726650** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	98.4	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1503147**
09-Mar-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24660** RunNo: **24660**
Prep Date: Analysis Date: **3/5/2015** SeqNo: **726650** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	106	75.6	144			
Trichloroethene (TCE)	17	1.0	20.00	0	83.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.3	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24691** RunNo: **24691**
Prep Date: Analysis Date: **3/6/2015** SeqNo: **727536** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1503147**
09-Mar-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24691**	RunNo: **24691**			
Prep Date:	Analysis Date: **3/6/2015**	SeqNo: **727536**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1503147**
09-Mar-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24691** RunNo: **24691**
Prep Date: Analysis Date: **3/6/2015** SeqNo: **727536** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24691** RunNo: **24691**
Prep Date: Analysis Date: **3/6/2015** SeqNo: **727537** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	99.4	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	91.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1503147** RcptNo: 1

Received by/date: AG 03/04/15

Logged By: **Lindsay Mangin** **3/4/2015 9:25:00 AM**

Completed By: **Lindsay Mangin** **3/4/2015 2:48:27 PM**

Reviewed By: AG 03/05/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT SUPERFUND Process Center-Monthly Samples

Project #: "6R166S-WALNUT"

Project Manager: LUIS GUERRA lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503147	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/3/15	9:18	Drink H2O	CLC27-150303	3-40ml	HgCl2	-001										X						
3/3/15	9:30	Drink H2O	CLC18-150303	3-40ml	HgCl2	-002										X						
3/3/15	9:35	Drink H2O	IS1-150303	3-40ml	HgCl2	-003										X						
3/3/15	9:36	Drink H2O	IS1-150303 DUPE	3-40ml	HgCl2	-004										X						
3/3/15	9:41	Drink H2O	C1-150303	3-40ml	HgCl2	-005										X						
3/3/15	9:45	Drink H2O	C2-150303	3-40ml	HgCl2	-006										X						
3/3/15	9:58	Drink H2O	ES1-150303	3-40ml	HgCl2	-007										X						
3/3/15	unk	LAB H2O	TRIP BLANK	2-40ml	HgCl2	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/3/15			A Mejallegos	03/04/15	0925
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruce

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 15, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Project Process Center Monthly Samples OrderNo.: 1504539

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/10/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1504539**
Date Reported: **4/15/2015**

CLIENT: City of Las Cruces
Client Sample ID: CLC 27_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:22:00 AM
Lab ID: 1504539-001
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Toluene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Ethylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Naphthalene	ND	2.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
2-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Acetone	ND	10		µg/L	1	4/14/2015 4:19:19 PM	R25516
Bromobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Bromodichloromethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Bromoform	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Bromomethane	ND	3.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
2-Butanone	ND	10		µg/L	1	4/14/2015 4:19:19 PM	R25516
Carbon disulfide	ND	10		µg/L	1	4/14/2015 4:19:19 PM	R25516
Carbon Tetrachloride	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Chlorobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Chloroethane	ND	2.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Chloroform	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Chloromethane	ND	3.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
2-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
4-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
cis-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Dibromochloromethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Dibromomethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,1-Dichloroethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,1-Dichloroethene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,3-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
2,2-Dichloropropane	ND	2.0		µg/L	1	4/14/2015 4:19:19 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC 27_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:22:00 AM
Lab ID: 1504539-001
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Hexachlorobutadiene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
2-Hexanone	ND	10		µg/L	1	4/14/2015 4:19:19 PM	R25516
Isopropylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
4-Isopropyltoluene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
4-Methyl-2-pentanone	ND	10		µg/L	1	4/14/2015 4:19:19 PM	R25516
Methylene Chloride	ND	3.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
n-Butylbenzene	ND	3.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
n-Propylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
sec-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Styrene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
tert-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Tetrachloroethene (PCE)	13	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
trans-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Trichlorofluoromethane	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Vinyl chloride	ND	1.0		µg/L	1	4/14/2015 4:19:19 PM	R25516
Xylenes, Total	ND	1.5		µg/L	1	4/14/2015 4:19:19 PM	R25516
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	4/14/2015 4:19:19 PM	R25516
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	4/14/2015 4:19:19 PM	R25516
Surr: Dibromofluoromethane	100	70-130		%REC	1	4/14/2015 4:19:19 PM	R25516
Surr: Toluene-d8	103	70-130		%REC	1	4/14/2015 4:19:19 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC 18_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:37:00 AM
Lab ID: 1504539-002
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Toluene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Ethylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Naphthalene	ND	2.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
2-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Acetone	ND	10		µg/L	1	4/14/2015 5:45:42 PM	R25516
Bromobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Bromodichloromethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Bromoform	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Bromomethane	ND	3.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
2-Butanone	ND	10		µg/L	1	4/14/2015 5:45:42 PM	R25516
Carbon disulfide	ND	10		µg/L	1	4/14/2015 5:45:42 PM	R25516
Carbon Tetrachloride	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Chlorobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Chloroethane	ND	2.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Chloroform	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Chloromethane	ND	3.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
2-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
4-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
cis-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Dibromochloromethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Dibromomethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,1-Dichloroethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,1-Dichloroethene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,3-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
2,2-Dichloropropane	ND	2.0		µg/L	1	4/14/2015 5:45:42 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC 18_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:37:00 AM
Lab ID: 1504539-002
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Hexachlorobutadiene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
2-Hexanone	ND	10		µg/L	1	4/14/2015 5:45:42 PM	R25516
Isopropylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
4-Isopropyltoluene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
4-Methyl-2-pentanone	ND	10		µg/L	1	4/14/2015 5:45:42 PM	R25516
Methylene Chloride	ND	3.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
n-Butylbenzene	ND	3.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
n-Propylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
sec-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Styrene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
tert-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Tetrachloroethene (PCE)	12	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
trans-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Trichlorofluoromethane	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Vinyl chloride	ND	1.0		µg/L	1	4/14/2015 5:45:42 PM	R25516
Xylenes, Total	ND	1.5		µg/L	1	4/14/2015 5:45:42 PM	R25516
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	4/14/2015 5:45:42 PM	R25516
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	4/14/2015 5:45:42 PM	R25516
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/14/2015 5:45:42 PM	R25516
Surr: Toluene-d8	104	70-130		%REC	1	4/14/2015 5:45:42 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:44:00 AM
Lab ID: 1504539-003
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Toluene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Ethylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Naphthalene	ND	2.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
2-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Acetone	ND	10		µg/L	1	4/14/2015 12:28:36 PM	R25516
Bromobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Bromodichloromethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Bromoform	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Bromomethane	ND	3.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
2-Butanone	ND	10		µg/L	1	4/14/2015 12:28:36 PM	R25516
Carbon disulfide	ND	10		µg/L	1	4/14/2015 12:28:36 PM	R25516
Carbon Tetrachloride	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Chlorobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Chloroethane	ND	2.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Chloroform	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Chloromethane	ND	3.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
2-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
4-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
cis-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Dibromochloromethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Dibromomethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,1-Dichloroethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,1-Dichloroethene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,3-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
2,2-Dichloropropane	ND	2.0		µg/L	1	4/14/2015 12:28:36 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:44:00 AM
Lab ID: 1504539-003
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Hexachlorobutadiene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
2-Hexanone	ND	10		µg/L	1	4/14/2015 12:28:36 PM	R25516
Isopropylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
4-Isopropyltoluene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
4-Methyl-2-pentanone	ND	10		µg/L	1	4/14/2015 12:28:36 PM	R25516
Methylene Chloride	ND	3.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
n-Butylbenzene	ND	3.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
n-Propylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
sec-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Styrene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
tert-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Tetrachloroethene (PCE)	10	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
trans-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Trichlorofluoromethane	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Vinyl chloride	ND	1.0		µg/L	1	4/14/2015 12:28:36 PM	R25516
Xylenes, Total	ND	1.5		µg/L	1	4/14/2015 12:28:36 PM	R25516
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	4/14/2015 12:28:36 PM	R25516
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	4/14/2015 12:28:36 PM	R25516
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	4/14/2015 12:28:36 PM	R25516
Surr: Toluene-d8	104	70-130		%REC	1	4/14/2015 12:28:36 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:48:00 AM
Lab ID: 1504539-004
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Toluene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Ethylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Naphthalene	ND	2.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
2-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Acetone	ND	10		µg/L	1	4/14/2015 6:14:25 PM	R25516
Bromobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Bromodichloromethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Bromoform	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Bromomethane	ND	3.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
2-Butanone	ND	10		µg/L	1	4/14/2015 6:14:25 PM	R25516
Carbon disulfide	ND	10		µg/L	1	4/14/2015 6:14:25 PM	R25516
Carbon Tetrachloride	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Chlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Chloroethane	ND	2.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Chloroform	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Chloromethane	ND	3.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
2-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
4-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
cis-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Dibromochloromethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Dibromomethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,1-Dichloroethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,1-Dichloroethene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,3-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
2,2-Dichloropropane	ND	2.0		µg/L	1	4/14/2015 6:14:25 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:48:00 AM
Lab ID: 1504539-004
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Hexachlorobutadiene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
2-Hexanone	ND	10		µg/L	1	4/14/2015 6:14:25 PM	R25516
Isopropylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
4-Isopropyltoluene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
4-Methyl-2-pentanone	ND	10		µg/L	1	4/14/2015 6:14:25 PM	R25516
Methylene Chloride	ND	3.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
n-Butylbenzene	ND	3.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
n-Propylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
sec-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Styrene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
tert-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
trans-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Trichlorofluoromethane	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Vinyl chloride	ND	1.0		µg/L	1	4/14/2015 6:14:25 PM	R25516
Xylenes, Total	ND	1.5		µg/L	1	4/14/2015 6:14:25 PM	R25516
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	4/14/2015 6:14:25 PM	R25516
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	4/14/2015 6:14:25 PM	R25516
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	4/14/2015 6:14:25 PM	R25516
Surr: Toluene-d8	109	70-130		%REC	1	4/14/2015 6:14:25 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:52:00 AM
Lab ID: 1504539-005
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Toluene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Ethylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Naphthalene	ND	2.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
2-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Acetone	ND	10		µg/L	1	4/14/2015 6:43:19 PM	R25516
Bromobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Bromodichloromethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Bromoform	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Bromomethane	ND	3.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
2-Butanone	ND	10		µg/L	1	4/14/2015 6:43:19 PM	R25516
Carbon disulfide	ND	10		µg/L	1	4/14/2015 6:43:19 PM	R25516
Carbon Tetrachloride	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Chlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Chloroethane	ND	2.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Chloroform	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Chloromethane	ND	3.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
2-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
4-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
cis-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Dibromochloromethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Dibromomethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,1-Dichloroethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,1-Dichloroethene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,3-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
2,2-Dichloropropane	ND	2.0		µg/L	1	4/14/2015 6:43:19 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:52:00 AM
Lab ID: 1504539-005
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Hexachlorobutadiene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
2-Hexanone	ND	10		µg/L	1	4/14/2015 6:43:19 PM	R25516
Isopropylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
4-Isopropyltoluene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
4-Methyl-2-pentanone	ND	10		µg/L	1	4/14/2015 6:43:19 PM	R25516
Methylene Chloride	ND	3.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
n-Butylbenzene	ND	3.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
n-Propylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
sec-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Styrene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
tert-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
trans-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Trichlorofluoromethane	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Vinyl chloride	ND	1.0		µg/L	1	4/14/2015 6:43:19 PM	R25516
Xylenes, Total	ND	1.5		µg/L	1	4/14/2015 6:43:19 PM	R25516
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/14/2015 6:43:19 PM	R25516
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	4/14/2015 6:43:19 PM	R25516
Surr: Dibromofluoromethane	100	70-130		%REC	1	4/14/2015 6:43:19 PM	R25516
Surr: Toluene-d8	107	70-130		%REC	1	4/14/2015 6:43:19 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:55:00 AM
Lab ID: 1504539-006
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Toluene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Ethylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Naphthalene	ND	2.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
2-Methylnaphthalene	ND	4.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Acetone	ND	10		µg/L	1	4/14/2015 7:12:13 PM	R25516
Bromobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Bromodichloromethane	4.5	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Bromoform	3.4	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Bromomethane	ND	3.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
2-Butanone	ND	10		µg/L	1	4/14/2015 7:12:13 PM	R25516
Carbon disulfide	ND	10		µg/L	1	4/14/2015 7:12:13 PM	R25516
Carbon Tetrachloride	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Chlorobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Chloroethane	ND	2.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Chloroform	4.4	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Chloromethane	ND	3.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
2-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
4-Chlorotoluene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
cis-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Dibromochloromethane	5.4	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Dibromomethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,1-Dichloroethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,1-Dichloroethene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,3-Dichloropropane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
2,2-Dichloropropane	ND	2.0		µg/L	1	4/14/2015 7:12:13 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150409
Project: Joint Superfund Project Process Center
Collection Date: 4/9/2015 9:55:00 AM
Lab ID: 1504539-006
Matrix: AQUEOUS
Received Date: 4/10/2015 9:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Hexachlorobutadiene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
2-Hexanone	ND	10		µg/L	1	4/14/2015 7:12:13 PM	R25516
Isopropylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
4-Isopropyltoluene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
4-Methyl-2-pentanone	ND	10		µg/L	1	4/14/2015 7:12:13 PM	R25516
Methylene Chloride	ND	3.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
n-Butylbenzene	ND	3.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
n-Propylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
sec-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Styrene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
tert-Butylbenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
trans-1,2-DCE	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Trichlorofluoromethane	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Vinyl chloride	ND	1.0		µg/L	1	4/14/2015 7:12:13 PM	R25516
Xylenes, Total	ND	1.5		µg/L	1	4/14/2015 7:12:13 PM	R25516
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	4/14/2015 7:12:13 PM	R25516
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	4/14/2015 7:12:13 PM	R25516
Surr: Dibromofluoromethane	103	70-130		%REC	1	4/14/2015 7:12:13 PM	R25516
Surr: Toluene-d8	102	70-130		%REC	1	4/14/2015 7:12:13 PM	R25516

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1504539**
15-Apr-15

Client: City of Las Cruces
Project: Joint Superfund Project Process Center Monthly

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R25516**	RunNo: **25516**			
Prep Date:	Analysis Date: **4/14/2015**	SeqNo: **755454**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1504539**
15-Apr-15

Client: City of Las Cruces
Project: Joint Superfund Project Process Center Monthly

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R25516** RunNo: **25516**
Prep Date: Analysis Date: **4/14/2015** SeqNo: **755454** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.4	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.9	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R25516** RunNo: **25516**
Prep Date: Analysis Date: **4/14/2015** SeqNo: **755470** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	20	1.0	20.00	0	98.9	70	130			
Chlorobenzene	19	1.0	20.00	0	95.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1504539**
15-Apr-15

Client: City of Las Cruces
Project: Joint Superfund Project Process Center Monthly

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R25516**	RunNo: **25516**			
Prep Date:	Analysis Date: **4/14/2015**	SeqNo: **755470**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	17	1.0	20.00	0	83.5	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.9		10.00		98.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1504539 RcptNo: 1

Received by/date: AG 04/10/15

Logged By: Lindsay Mangin 4/10/2015 9:38:00 AM

Completed By: Lindsay Mangin 4/13/2015 9:55:54 AM

Reviewed By: CS 04/13/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? UPS

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Joint Superfund Process Center-Monthly Samples

Project #: "6R1665-WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1504539	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
4/9/15	0922	Drink H2O	CLC 27-150409	3-40 ml	HgCl2	-001										X						
4/9/15	0937	Drink H2O	CLC 18-150409	3-40 ml	HgCl2	-002										X						
4/9/15	0944	Drink H2O	ISI-150409	3-40 ml	HgCl2	-003										X						
4/9/15	0948	Drink H2O	C1-150409	3-40 ml	HgCl2	-004										X						
4/9/15	0952	Drink H2O	C2-150409	3-40 ml	HgCl2	-005										X						
4/9/15	0955	Drink H2O	ESI-150409	3-40 ml	HgCl2	-006										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/9/15	1450	Laura Montoya	Ann Gallegos	04/10/15	0938
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send invoice to Luis Guerra c/o City of LC

Send results to Luis Guerra (email)

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 15, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center Monthly Samples OrderNo.: 1504543

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/10/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1504543**
Date Reported: **4/15/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150409
Project: Joint Superfund Process Center Monthly
Collection Date: 4/9/2015 10:08:00 AM
Lab ID: 1504543-001
Matrix: AIR
Received Date: 4/10/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Toluene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Ethylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Naphthalene	ND	0.20		µg/L	1	4/14/2015 11:13:44 AM	R25514
1-Methylnaphthalene	ND	0.40		µg/L	1	4/14/2015 11:13:44 AM	R25514
2-Methylnaphthalene	ND	0.40		µg/L	1	4/14/2015 11:13:44 AM	R25514
Acetone	ND	1.0		µg/L	1	4/14/2015 11:13:44 AM	R25514
Bromobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Bromodichloromethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Bromoform	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Bromomethane	ND	0.20		µg/L	1	4/14/2015 11:13:44 AM	R25514
2-Butanone	ND	1.0		µg/L	1	4/14/2015 11:13:44 AM	R25514
Carbon disulfide	ND	1.0		µg/L	1	4/14/2015 11:13:44 AM	R25514
Carbon tetrachloride	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Chlorobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Chloroethane	ND	0.20		µg/L	1	4/14/2015 11:13:44 AM	R25514
Chloroform	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Chloromethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
2-Chlorotoluene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
4-Chlorotoluene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
cis-1,2-DCE	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	4/14/2015 11:13:44 AM	R25514
Dibromochloromethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Dibromomethane	ND	0.20		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,3-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,4-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Dichlorodifluoromethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,1-Dichloroethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,1-Dichloroethene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,3-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
2,2-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150409
Project: Joint Superfund Process Center Monthly
Collection Date: 4/9/2015 10:08:00 AM
Lab ID: 1504543-001
Matrix: AIR
Received Date: 4/10/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Hexachlorobutadiene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
2-Hexanone	ND	1.0		µg/L	1	4/14/2015 11:13:44 AM	R25514
Isopropylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
4-Isopropyltoluene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
4-Methyl-2-pentanone	ND	1.0		µg/L	1	4/14/2015 11:13:44 AM	R25514
Methylene chloride	ND	0.30		µg/L	1	4/14/2015 11:13:44 AM	R25514
n-Butylbenzene	ND	0.30		µg/L	1	4/14/2015 11:13:44 AM	R25514
n-Propylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
sec-Butylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Styrene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
tert-Butylbenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
trans-1,2-DCE	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,1,1-Trichloroethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,1,2-Trichloroethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Trichloroethene (TCE)	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Trichlorofluoromethane	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
1,2,3-Trichloropropane	ND	0.20		µg/L	1	4/14/2015 11:13:44 AM	R25514
Vinyl chloride	ND	0.10		µg/L	1	4/14/2015 11:13:44 AM	R25514
Xylenes, Total	ND	0.15		µg/L	1	4/14/2015 11:13:44 AM	R25514
Surr: Dibromofluoromethane	95.8	70-130		%REC	1	4/14/2015 11:13:44 AM	R25514
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%REC	1	4/14/2015 11:13:44 AM	R25514
Surr: Toluene-d8	93.6	70-130		%REC	1	4/14/2015 11:13:44 AM	R25514
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	1	4/14/2015 11:13:44 AM	R25514

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150409 DUPE
Project: Joint Superfund Process Center Monthly
Collection Date: 4/9/2015 10:09:00 AM
Lab ID: 1504543-002
Matrix: AIR
Received Date: 4/10/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Toluene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Ethylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Naphthalene	ND	0.20		µg/L	1	4/14/2015 12:11:15 PM	R25514
1-Methylnaphthalene	ND	0.40		µg/L	1	4/14/2015 12:11:15 PM	R25514
2-Methylnaphthalene	ND	0.40		µg/L	1	4/14/2015 12:11:15 PM	R25514
Acetone	ND	1.0		µg/L	1	4/14/2015 12:11:15 PM	R25514
Bromobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Bromodichloromethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Bromoform	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Bromomethane	ND	0.20		µg/L	1	4/14/2015 12:11:15 PM	R25514
2-Butanone	ND	1.0		µg/L	1	4/14/2015 12:11:15 PM	R25514
Carbon disulfide	ND	1.0		µg/L	1	4/14/2015 12:11:15 PM	R25514
Carbon tetrachloride	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Chlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Chloroethane	ND	0.20		µg/L	1	4/14/2015 12:11:15 PM	R25514
Chloroform	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Chloromethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
2-Chlorotoluene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
4-Chlorotoluene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
cis-1,2-DCE	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	4/14/2015 12:11:15 PM	R25514
Dibromochloromethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Dibromomethane	ND	0.20		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,3-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,4-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Dichlorodifluoromethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,1-Dichloroethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,1-Dichloroethene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,3-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
2,2-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150409 DUPE
Project: Joint Superfund Process Center Monthly
Collection Date: 4/9/2015 10:09:00 AM
Lab ID: 1504543-002
Matrix: AIR
Received Date: 4/10/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Hexachlorobutadiene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
2-Hexanone	ND	1.0		µg/L	1	4/14/2015 12:11:15 PM	R25514
Isopropylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
4-Isopropyltoluene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
4-Methyl-2-pentanone	ND	1.0		µg/L	1	4/14/2015 12:11:15 PM	R25514
Methylene chloride	ND	0.30		µg/L	1	4/14/2015 12:11:15 PM	R25514
n-Butylbenzene	ND	0.30		µg/L	1	4/14/2015 12:11:15 PM	R25514
n-Propylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
sec-Butylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Styrene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
tert-Butylbenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
trans-1,2-DCE	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,1,1-Trichloroethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,1,2-Trichloroethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Trichloroethene (TCE)	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Trichlorofluoromethane	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
1,2,3-Trichloropropane	ND	0.20		µg/L	1	4/14/2015 12:11:15 PM	R25514
Vinyl chloride	ND	0.10		µg/L	1	4/14/2015 12:11:15 PM	R25514
Xylenes, Total	ND	0.15		µg/L	1	4/14/2015 12:11:15 PM	R25514
Surr: Dibromofluoromethane	103	70-130		%REC	1	4/14/2015 12:11:15 PM	R25514
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	4/14/2015 12:11:15 PM	R25514
Surr: Toluene-d8	99.8	70-130		%REC	1	4/14/2015 12:11:15 PM	R25514
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	4/14/2015 12:11:15 PM	R25514

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150409
Project: Joint Superfund Process Center Monthly
Collection Date: 4/9/2015 10:45:00 AM
Lab ID: 1504543-003
Matrix: AIR
Received Date: 4/10/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Toluene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Ethylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Naphthalene	ND	0.20		µg/L	1	4/14/2015 12:39:59 PM	R25514
1-Methylnaphthalene	ND	0.40		µg/L	1	4/14/2015 12:39:59 PM	R25514
2-Methylnaphthalene	ND	0.40		µg/L	1	4/14/2015 12:39:59 PM	R25514
Acetone	ND	1.0		µg/L	1	4/14/2015 12:39:59 PM	R25514
Bromobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Bromodichloromethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Bromoform	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Bromomethane	ND	0.20		µg/L	1	4/14/2015 12:39:59 PM	R25514
2-Butanone	ND	1.0		µg/L	1	4/14/2015 12:39:59 PM	R25514
Carbon disulfide	ND	1.0		µg/L	1	4/14/2015 12:39:59 PM	R25514
Carbon tetrachloride	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Chlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Chloroethane	ND	0.20		µg/L	1	4/14/2015 12:39:59 PM	R25514
Chloroform	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Chloromethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
2-Chlorotoluene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
4-Chlorotoluene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
cis-1,2-DCE	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	4/14/2015 12:39:59 PM	R25514
Dibromochloromethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Dibromomethane	ND	0.20		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,3-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,4-Dichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Dichlorodifluoromethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,1-Dichloroethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,1-Dichloroethene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,3-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
2,2-Dichloropropane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150409
Project: Joint Superfund Process Center Monthly
Collection Date: 4/9/2015 10:45:00 AM
Lab ID: 1504543-003
Matrix: AIR
Received Date: 4/10/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Hexachlorobutadiene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
2-Hexanone	ND	1.0		µg/L	1	4/14/2015 12:39:59 PM	R25514
Isopropylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
4-Isopropyltoluene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
4-Methyl-2-pentanone	ND	1.0		µg/L	1	4/14/2015 12:39:59 PM	R25514
Methylene chloride	ND	0.30		µg/L	1	4/14/2015 12:39:59 PM	R25514
n-Butylbenzene	ND	0.30		µg/L	1	4/14/2015 12:39:59 PM	R25514
n-Propylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
sec-Butylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Styrene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
tert-Butylbenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Tetrachloroethene (PCE)	0.22	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
trans-1,2-DCE	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,1,1-Trichloroethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,1,2-Trichloroethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Trichloroethene (TCE)	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Trichlorofluoromethane	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
1,2,3-Trichloropropane	ND	0.20		µg/L	1	4/14/2015 12:39:59 PM	R25514
Vinyl chloride	ND	0.10		µg/L	1	4/14/2015 12:39:59 PM	R25514
Xylenes, Total	ND	0.15		µg/L	1	4/14/2015 12:39:59 PM	R25514
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	4/14/2015 12:39:59 PM	R25514
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%REC	1	4/14/2015 12:39:59 PM	R25514
Surr: Toluene-d8	106	70-130		%REC	1	4/14/2015 12:39:59 PM	R25514
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	4/14/2015 12:39:59 PM	R25514

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1504543 RcptNo: 1

Received by/date: AG 04/10/15

Logged By: **Lindsay Mangin** 4/10/2015 9:45:00 AM

Completed By: **Lindsay Mangin** 4/13/2015 10:31:58 AM

Reviewed By: 04/13/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? UPS

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: (575) 528-3609

email or Fax#: (575) 528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT Superfund Process Center Monthly Samples

Project #: "GRIGGS-WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☒ No

Sample Temperature: ~~2~~ N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1504543	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~ VOC)	8270 (Semi-VOA)					Air Bubbles (Y or N)
1/9/15	1008	AIR	AS1-150409	1 Tedlar Bag	NONE	-001										X						
1/9/15	1009	AIR	AS1-150409 Dupe	1 TEDLAR BAGS	NONE	-002										X						
1/9/15	1045	AIR	AS2-150409	1 TEDLAR BAGS	NONE	-003										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/9/15	1450	Laura Montoya	A Magallanes	04/10/15	0945
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

... This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 28, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1505948

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/21/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1505948**
Date Reported: **5/28/2015**

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:35:00 AM
Lab ID: 1505948-001
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 12:27:54 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 12:27:54 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 12:27:54 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 12:27:54 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:35:00 AM
Lab ID: 1505948-001
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 12:27:54 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 12:27:54 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Tetrachloroethene (PCE)	13	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 12:27:54 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 12:27:54 AM	R26391
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	5/23/2015 12:27:54 AM	R26391
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	5/23/2015 12:27:54 AM	R26391
Surr: Dibromofluoromethane	101	70-130		%REC	1	5/23/2015 12:27:54 AM	R26391
Surr: Toluene-d8	97.5	70-130		%REC	1	5/23/2015 12:27:54 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:43:00 AM
Lab ID: 1505948-002
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 1:50:16 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 1:50:16 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 1:50:16 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 1:50:16 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:43:00 AM
Lab ID: 1505948-002
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 1:50:16 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 1:50:16 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Tetrachloroethene (PCE)	9.6	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 1:50:16 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 1:50:16 AM	R26391
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%REC	1	5/23/2015 1:50:16 AM	R26391
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	5/23/2015 1:50:16 AM	R26391
Surr: Dibromofluoromethane	103	70-130		%REC	1	5/23/2015 1:50:16 AM	R26391
Surr: Toluene-d8	99.1	70-130		%REC	1	5/23/2015 1:50:16 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:50:00 AM
Lab ID: 1505948-003
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 2:17:41 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 2:17:41 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 2:17:41 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 2:17:41 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:50:00 AM
Lab ID: 1505948-003
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 2:17:41 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 2:17:41 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Tetrachloroethene (PCE)	11	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 2:17:41 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 2:17:41 AM	R26391
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	5/23/2015 2:17:41 AM	R26391
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	5/23/2015 2:17:41 AM	R26391
Surr: Dibromofluoromethane	105	70-130		%REC	1	5/23/2015 2:17:41 AM	R26391
Surr: Toluene-d8	101	70-130		%REC	1	5/23/2015 2:17:41 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:56:00 AM
Lab ID: 1505948-004
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 2:45:08 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 2:45:08 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 2:45:08 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 2:45:08 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:56:00 AM
Lab ID: 1505948-004
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 2:45:08 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 2:45:08 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 2:45:08 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 2:45:08 AM	R26391
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	5/23/2015 2:45:08 AM	R26391
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	5/23/2015 2:45:08 AM	R26391
Surr: Dibromofluoromethane	102	70-130		%REC	1	5/23/2015 2:45:08 AM	R26391
Surr: Toluene-d8	101	70-130		%REC	1	5/23/2015 2:45:08 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 10:01:00 AM
Lab ID: 1505948-005
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 3:12:38 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 3:12:38 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 3:12:38 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 3:12:38 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 10:01:00 AM
Lab ID: 1505948-005
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 3:12:38 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 3:12:38 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 3:12:38 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 3:12:38 AM	R26391
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	1	5/23/2015 3:12:38 AM	R26391
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	5/23/2015 3:12:38 AM	R26391
Surr: Dibromofluoromethane	103	70-130		%REC	1	5/23/2015 3:12:38 AM	R26391
Surr: Toluene-d8	98.1	70-130		%REC	1	5/23/2015 3:12:38 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 10:10:00 AM
Lab ID: 1505948-006
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 3:40:11 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Bromoform	6.1	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 3:40:11 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 3:40:11 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Dibromochloromethane	1.8	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 3:40:11 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 10:10:00 AM
Lab ID: 1505948-006
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 3:40:11 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 3:40:11 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 3:40:11 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 3:40:11 AM	R26391
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	5/23/2015 3:40:11 AM	R26391
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	5/23/2015 3:40:11 AM	R26391
Surr: Dibromofluoromethane	101	70-130		%REC	1	5/23/2015 3:40:11 AM	R26391
Surr: Toluene-d8	96.4	70-130		%REC	1	5/23/2015 3:40:11 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150520DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:51:00 AM
Lab ID: 1505948-007
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 4:07:43 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 4:07:43 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 4:07:43 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 4:07:43 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150520DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 9:51:00 AM
Lab ID: 1505948-007
Matrix: AQUEOUS
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 4:07:43 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 4:07:43 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Tetrachloroethene (PCE)	12	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 4:07:43 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 4:07:43 AM	R26391
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	5/23/2015 4:07:43 AM	R26391
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	5/23/2015 4:07:43 AM	R26391
Surr: Dibromofluoromethane	102	70-130		%REC	1	5/23/2015 4:07:43 AM	R26391
Surr: Toluene-d8	102	70-130		%REC	1	5/23/2015 4:07:43 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund Process Center-Monthly
Collection Date:
Lab ID: 1505948-008
Matrix: TRIP BLANK
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Toluene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Ethylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Naphthalene	ND	2.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
2-Methylnaphthalene	ND	4.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Acetone	ND	10		µg/L	1	5/23/2015 4:35:14 AM	R26391
Bromobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Bromodichloromethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Bromoform	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Bromomethane	ND	3.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
2-Butanone	ND	10		µg/L	1	5/23/2015 4:35:14 AM	R26391
Carbon disulfide	ND	10		µg/L	1	5/23/2015 4:35:14 AM	R26391
Carbon Tetrachloride	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Chlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Chloroethane	ND	2.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Chloroform	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Chloromethane	ND	3.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
2-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
4-Chlorotoluene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
cis-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Dibromochloromethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Dibromomethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,1-Dichloroethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,1-Dichloroethene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,3-Dichloropropane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
2,2-Dichloropropane	ND	2.0		µg/L	1	5/23/2015 4:35:14 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund Process Center-Monthly
Collection Date:
Lab ID: 1505948-008
Matrix: TRIP BLANK
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Hexachlorobutadiene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
2-Hexanone	ND	10		µg/L	1	5/23/2015 4:35:14 AM	R26391
Isopropylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
4-Isopropyltoluene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
4-Methyl-2-pentanone	ND	10		µg/L	1	5/23/2015 4:35:14 AM	R26391
Methylene Chloride	ND	3.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
n-Butylbenzene	ND	3.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
n-Propylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
sec-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Styrene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
tert-Butylbenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
trans-1,2-DCE	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Trichlorofluoromethane	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Vinyl chloride	ND	1.0		µg/L	1	5/23/2015 4:35:14 AM	R26391
Xylenes, Total	ND	1.5		µg/L	1	5/23/2015 4:35:14 AM	R26391
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%REC	1	5/23/2015 4:35:14 AM	R26391
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	5/23/2015 4:35:14 AM	R26391
Surr: Dibromofluoromethane	102	70-130		%REC	1	5/23/2015 4:35:14 AM	R26391
Surr: Toluene-d8	95.2	70-130		%REC	1	5/23/2015 4:35:14 AM	R26391

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1505948**
28-May-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID	**5ml-rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8260B: VOLATILES**		
Client ID:	**PBW**	Batch ID:	**R26391**	RunNo:	**26391**		
Prep Date:		Analysis Date:	**5/22/2015**	SeqNo:	**784294**	Units:	**µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1505948**
28-May-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26391** RunNo: **26391**
Prep Date: Analysis Date: **5/22/2015** SeqNo: **784294** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		109	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26391** RunNo: **26391**
Prep Date: Analysis Date: **5/22/2015** SeqNo: **784296** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1505948**
28-May-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26391** RunNo: **26391**
Prep Date: Analysis Date: **5/22/2015** SeqNo: **784296** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	116	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	92.8	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.9	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26391** RunNo: **26391**
Prep Date: Analysis Date: **5/22/2015** SeqNo: **784329** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1505948**
28-May-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID	**b2**	SampType:	**MBLK**		TestCode:	**EPA Method 8260B: VOLATILES**					
Client ID:	**PBW**	Batch ID:	**R26391**		RunNo:	**26391**					
Prep Date:		Analysis Date:	**5/22/2015**		SeqNo:	**784329**	Units:	**µg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane		ND	2.0								
Dibromochloromethane		ND	1.0								
Dibromomethane		ND	1.0								
1,2-Dichlorobenzene		ND	1.0								
1,3-Dichlorobenzene		ND	1.0								
1,4-Dichlorobenzene		ND	1.0								
Dichlorodifluoromethane		ND	1.0								
1,1-Dichloroethane		ND	1.0								
1,1-Dichloroethene		ND	1.0								
1,2-Dichloropropane		ND	1.0								
1,3-Dichloropropane		ND	1.0								
2,2-Dichloropropane		ND	2.0								
1,1-Dichloropropene		ND	1.0								
Hexachlorobutadiene		ND	1.0								
2-Hexanone		ND	10								
Isopropylbenzene		ND	1.0								
4-Isopropyltoluene		ND	1.0								
4-Methyl-2-pentanone		ND	10								
Methylene Chloride		ND	3.0								
n-Butylbenzene		ND	3.0								
n-Propylbenzene		ND	1.0								
sec-Butylbenzene		ND	1.0								
Styrene		ND	1.0								
tert-Butylbenzene		ND	1.0								
1,1,1,2-Tetrachloroethane		ND	1.0								
1,1,2,2-Tetrachloroethane		ND	2.0								
Tetrachloroethene (PCE)		ND	1.0								
trans-1,2-DCE		ND	1.0								
trans-1,3-Dichloropropene		ND	1.0								
1,2,3-Trichlorobenzene		ND	1.0								
1,2,4-Trichlorobenzene		ND	1.0								
1,1,1-Trichloroethane		ND	1.0								
1,1,2-Trichloroethane		ND	1.0								
Trichloroethene (TCE)		ND	1.0								
Trichlorofluoromethane		ND	1.0								
1,2,3-Trichloropropane		ND	2.0								
Vinyl chloride		ND	1.0								
Xylenes, Total		ND	1.5								
Surr: 1,2-Dichloroethane-d4		10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1505948**
28-May-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26391** RunNo: **26391**
Prep Date: Analysis Date: **5/22/2015** SeqNo: **784329** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26391** RunNo: **26391**
Prep Date: Analysis Date: **5/22/2015** SeqNo: **784330** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	22	1.0	20.00	0	112	70	130			
Chlorobenzene	22	1.0	20.00	0	110	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	119	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	99.8	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1505948** RcptNo: **1**

Received by/date: J.A. 05/21/15

Logged By: **Ashley Gallegos** **5/21/2015 8:50:00 AM** AG

Completed By: **Ashley Gallegos** **5/21/2015 10:31:56 AM** AG

Reviewed By: CS 05/21/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH:
    (Note discrepancies on chain of custody)
    (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Joint Superfund Process Center - Monthly Samples

Project #: CLC-0 "6R166S-WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1505948	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
5/20/15	0935	Drink H_2O	CLC27-150520	3-40ml	$HgCl_2$	-001										X						
5/20/15	0943	Drink H_2O	CLC18-150520	3-40ml	$HgCl_2$	-002										X						
5/20/15	0950	Drink H_2O	IS1-150520	3-40ml	$HgCl_2$	-003										X						
5/20/15	0956	Drink H_2O	C1-150520	3-40ml	$HgCl_2$	-004										X						
5/20/15	1001	Drink H_2O	C2-150520	3-40ml	$HgCl_2$	-005										X						
5/20/15	1010	Drink H_2O	ES1-150520	3-40ml	$HgCl_2$	-006										X						
5/20/15	0951	Drink H_2O	IS1-150520 DUPE	3-40ml	$HgCl_2$	-007										X						
5/20/15	UNK	Lab H_2O	TRIP BLANK	2-40ml	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/20/15	1330	Laura Montoya	[illegible]	05/21/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 02, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1505959

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/21/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1505959**
Date Reported: **6/2/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 11:16:00 AM
Lab ID: 1505959-001
Matrix: AIR
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Toluene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Ethylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Naphthalene	ND	0.20		µg/L	1	5/28/2015 12:37:29 PM	R26465
1-Methylnaphthalene	ND	0.40		µg/L	1	5/28/2015 12:37:29 PM	R26465
2-Methylnaphthalene	ND	0.40		µg/L	1	5/28/2015 12:37:29 PM	R26465
Acetone	ND	1.0		µg/L	1	5/28/2015 12:37:29 PM	R26465
Bromobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Bromodichloromethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Bromoform	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Bromomethane	ND	0.20		µg/L	1	5/28/2015 12:37:29 PM	R26465
2-Butanone	ND	1.0		µg/L	1	5/28/2015 12:37:29 PM	R26465
Carbon disulfide	ND	1.0		µg/L	1	5/28/2015 12:37:29 PM	R26465
Carbon tetrachloride	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Chlorobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Chloroethane	ND	0.20		µg/L	1	5/28/2015 12:37:29 PM	R26465
Chloroform	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Chloromethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
2-Chlorotoluene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
4-Chlorotoluene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
cis-1,2-DCE	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	5/28/2015 12:37:29 PM	R26465
Dibromochloromethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Dibromomethane	ND	0.20		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2-Dichlorobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,3-Dichlorobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,4-Dichlorobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Dichlorodifluoromethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,1-Dichloroethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,1-Dichloroethene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2-Dichloropropane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,3-Dichloropropane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
2,2-Dichloropropane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 11:16:00 AM
Lab ID: 1505959-001
Matrix: AIR
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Hexachlorobutadiene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
2-Hexanone	ND	1.0		µg/L	1	5/28/2015 12:37:29 PM	R26465
Isopropylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
4-Isopropyltoluene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
4-Methyl-2-pentanone	ND	1.0		µg/L	1	5/28/2015 12:37:29 PM	R26465
Methylene chloride	ND	0.30		µg/L	1	5/28/2015 12:37:29 PM	R26465
n-Butylbenzene	ND	0.30		µg/L	1	5/28/2015 12:37:29 PM	R26465
n-Propylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
sec-Butylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Styrene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
tert-Butylbenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
trans-1,2-DCE	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,1,1-Trichloroethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,1,2-Trichloroethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Trichloroethene (TCE)	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Trichlorofluoromethane	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
1,2,3-Trichloropropane	ND	0.20		µg/L	1	5/28/2015 12:37:29 PM	R26465
Vinyl chloride	ND	0.10		µg/L	1	5/28/2015 12:37:29 PM	R26465
Xylenes, Total	ND	0.15		µg/L	1	5/28/2015 12:37:29 PM	R26465
Surr: Dibromofluoromethane	107	70-130		%REC	1	5/28/2015 12:37:29 PM	R26465
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	5/28/2015 12:37:29 PM	R26465
Surr: Toluene-d8	104	70-130		%REC	1	5/28/2015 12:37:29 PM	R26465
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	5/28/2015 12:37:29 PM	R26465

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 11:20:00 AM
Lab ID: 1505959-002
Matrix: AIR
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Toluene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Ethylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Naphthalene	ND	0.20		µg/L	1	5/28/2015 1:05:01 PM	R26465
1-Methylnaphthalene	ND	0.40		µg/L	1	5/28/2015 1:05:01 PM	R26465
2-Methylnaphthalene	ND	0.40		µg/L	1	5/28/2015 1:05:01 PM	R26465
Acetone	ND	1.0		µg/L	1	5/28/2015 1:05:01 PM	R26465
Bromobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Bromodichloromethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Bromoform	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Bromomethane	ND	0.20		µg/L	1	5/28/2015 1:05:01 PM	R26465
2-Butanone	ND	1.0		µg/L	1	5/28/2015 1:05:01 PM	R26465
Carbon disulfide	ND	1.0		µg/L	1	5/28/2015 1:05:01 PM	R26465
Carbon tetrachloride	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Chlorobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Chloroethane	ND	0.20		µg/L	1	5/28/2015 1:05:01 PM	R26465
Chloroform	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Chloromethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
2-Chlorotoluene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
4-Chlorotoluene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
cis-1,2-DCE	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	5/28/2015 1:05:01 PM	R26465
Dibromochloromethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Dibromomethane	ND	0.20		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2-Dichlorobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,3-Dichlorobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,4-Dichlorobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Dichlorodifluoromethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,1-Dichloroethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,1-Dichloroethene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2-Dichloropropane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,3-Dichloropropane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
2,2-Dichloropropane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150520
Project: Joint Superfund Process Center-Monthly
Collection Date: 5/20/2015 11:20:00 AM
Lab ID: 1505959-002
Matrix: AIR
Received Date: 5/21/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Hexachlorobutadiene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
2-Hexanone	ND	1.0		µg/L	1	5/28/2015 1:05:01 PM	R26465
Isopropylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
4-Isopropyltoluene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
4-Methyl-2-pentanone	ND	1.0		µg/L	1	5/28/2015 1:05:01 PM	R26465
Methylene chloride	ND	0.30		µg/L	1	5/28/2015 1:05:01 PM	R26465
n-Butylbenzene	ND	0.30		µg/L	1	5/28/2015 1:05:01 PM	R26465
n-Propylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
sec-Butylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Styrene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
tert-Butylbenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
trans-1,2-DCE	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,1,1-Trichloroethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,1,2-Trichloroethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Trichloroethene (TCE)	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Trichlorofluoromethane	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
1,2,3-Trichloropropane	ND	0.20		µg/L	1	5/28/2015 1:05:01 PM	R26465
Vinyl chloride	ND	0.10		µg/L	1	5/28/2015 1:05:01 PM	R26465
Xylenes, Total	ND	0.15		µg/L	1	5/28/2015 1:05:01 PM	R26465
Surr: Dibromofluoromethane	106	70-130		%REC	1	5/28/2015 1:05:01 PM	R26465
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	5/28/2015 1:05:01 PM	R26465
Surr: Toluene-d8	101	70-130		%REC	1	5/28/2015 1:05:01 PM	R26465
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	5/28/2015 1:05:01 PM	R26465

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1505959 RcptNo: 1

Received by/date: 05/21/15

Logged By: Ashley Gallegos 5/21/2015 8:50:00 AM

Completed By: Ashley Gallegos 5/21/2015 11:56:01 AM

Reviewed By: 05/21/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT Superfund Process Center - Monthly Samples

Project #: CLC- "GRIGGS- WALNUT"

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1505959	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
5/20/15	1116	AIR	AS1-150520	1 Tedlar Bag	NONE	-001										X						
5/20/15	1120	AIR	AS2-150520	1 Tedlar Bag	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/20/15	1330	Laura Montoya	[illegible]	05/21/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 12, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: CLC Joint Superfund Process Center - Monthly Project OrderNo.: 1506246

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/4/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1506246**
Date Reported: **6/12/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:26:00 AM
Lab ID: 1506246-001
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 2:51:42 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 2:51:42 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 2:51:42 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 2:51:42 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:26:00 AM
Lab ID: 1506246-001
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 2:51:42 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 2:51:42 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Tetrachloroethene (PCE)	12	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 2:51:42 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 2:51:42 AM	R26754
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%REC	1	6/11/2015 2:51:42 AM	R26754
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	6/11/2015 2:51:42 AM	R26754
Surr: Dibromofluoromethane	93.9	70-130		%REC	1	6/11/2015 2:51:42 AM	R26754
Surr: Toluene-d8	100	70-130		%REC	1	6/11/2015 2:51:42 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-150603 DUPE
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:27:00 AM
Lab ID: 1506246-002
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 4:18:19 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 4:18:19 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 4:18:19 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 4:18:19 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27-150603 DUPE
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:27:00 AM
Lab ID: 1506246-002
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 4:18:19 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 4:18:19 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Tetrachloroethene (PCE)	13	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 4:18:19 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 4:18:19 AM	R26754
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	6/11/2015 4:18:19 AM	R26754
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	6/11/2015 4:18:19 AM	R26754
Surr: Dibromofluoromethane	106	70-130		%REC	1	6/11/2015 4:18:19 AM	R26754
Surr: Toluene-d8	101	70-130		%REC	1	6/11/2015 4:18:19 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:40:00 AM
Lab ID: 1506246-003
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 4:47:12 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 4:47:12 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 4:47:12 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 4:47:12 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:40:00 AM
Lab ID: 1506246-003
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 4:47:12 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 4:47:12 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Tetrachloroethene (PCE)	11	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 4:47:12 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 4:47:12 AM	R26754
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	6/11/2015 4:47:12 AM	R26754
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	6/11/2015 4:47:12 AM	R26754
Surr: Dibromofluoromethane	103	70-130		%REC	1	6/11/2015 4:47:12 AM	R26754
Surr: Toluene-d8	105	70-130		%REC	1	6/11/2015 4:47:12 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:47:00 AM
Lab ID: 1506246-004
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 5:16:07 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 5:16:07 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 5:16:07 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 5:16:07 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:47:00 AM
Lab ID: 1506246-004
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 5:16:07 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 5:16:07 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Tetrachloroethene (PCE)	11	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 5:16:07 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 5:16:07 AM	R26754
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	6/11/2015 5:16:07 AM	R26754
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	6/11/2015 5:16:07 AM	R26754
Surr: Dibromofluoromethane	95.4	70-130		%REC	1	6/11/2015 5:16:07 AM	R26754
Surr: Toluene-d8	102	70-130		%REC	1	6/11/2015 5:16:07 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:55:00 AM
Lab ID: 1506246-005
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 5:44:52 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 5:44:52 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 5:44:52 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 5:44:52 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 9:55:00 AM
Lab ID: 1506246-005
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 5:44:52 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 5:44:52 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 5:44:52 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 5:44:52 AM	R26754
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	6/11/2015 5:44:52 AM	R26754
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	6/11/2015 5:44:52 AM	R26754
Surr: Dibromofluoromethane	99.3	70-130		%REC	1	6/11/2015 5:44:52 AM	R26754
Surr: Toluene-d8	97.6	70-130		%REC	1	6/11/2015 5:44:52 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:00:00 AM
Lab ID: 1506246-006
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 6:13:44 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 6:13:44 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 6:13:44 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 6:13:44 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:00:00 AM
Lab ID: 1506246-006
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 6:13:44 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 6:13:44 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 6:13:44 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 6:13:44 AM	R26754
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%REC	1	6/11/2015 6:13:44 AM	R26754
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/11/2015 6:13:44 AM	R26754
Surr: Dibromofluoromethane	94.8	70-130		%REC	1	6/11/2015 6:13:44 AM	R26754
Surr: Toluene-d8	103	70-130		%REC	1	6/11/2015 6:13:44 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:04:00 AM
Lab ID: 1506246-007
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 6:42:39 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Bromoform	14	1.0		µg/L	1	6/11/2015 10:58:10 AM	R26777
Bromomethane	ND	3.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 6:42:39 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 6:42:39 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Dibromochloromethane	3.5	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 6:42:39 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:04:00 AM
Lab ID: 1506246-007
Matrix: AQUEOUS
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 6:42:39 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 6:42:39 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 6:42:39 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 6:42:39 AM	R26754
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%REC	1	6/11/2015 6:42:39 AM	R26754
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	1	6/11/2015 6:42:39 AM	R26754
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	6/11/2015 6:42:39 AM	R26754
Surr: Toluene-d8	101	70-130		%REC	1	6/11/2015 6:42:39 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: CLC Joint Superfund Process Center - M
Collection Date:
Lab ID: 1506246-008
Matrix: TRIP BLANK
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Toluene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Naphthalene	ND	2.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Acetone	ND	10		µg/L	1	6/11/2015 7:11:34 AM	R26754
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Bromoform	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Bromomethane	ND	3.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
2-Butanone	ND	10		µg/L	1	6/11/2015 7:11:34 AM	R26754
Carbon disulfide	ND	10		µg/L	1	6/11/2015 7:11:34 AM	R26754
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Chloroethane	ND	2.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Chloroform	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Chloromethane	ND	3.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 7:11:34 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: CLC Joint Superfund Process Center - M
Collection Date:
Lab ID: 1506246-008
Matrix: TRIP BLANK
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
2-Hexanone	ND	10		µg/L	1	6/11/2015 7:11:34 AM	R26754
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 7:11:34 AM	R26754
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Styrene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 7:11:34 AM	R26754
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 7:11:34 AM	R26754
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	6/11/2015 7:11:34 AM	R26754
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/11/2015 7:11:34 AM	R26754
Surr: Dibromofluoromethane	106	70-130		%REC	1	6/11/2015 7:11:34 AM	R26754
Surr: Toluene-d8	98.3	70-130		%REC	1	6/11/2015 7:11:34 AM	R26754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506246**
12-Jun-15

Client: City of Las Cruces
Project: CLC Joint Superfund Process Center - Monthly

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R26754**	RunNo: **26754**	
Prep Date:	Analysis Date: **6/10/2015**	SeqNo: **797308**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506246**
12-Jun-15

Client: City of Las Cruces
Project: CLC Joint Superfund Process Center - Monthly

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26754** RunNo: **26754**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797308** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26754** RunNo: **26754**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797310** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506246**
12-Jun-15

Client: City of Las Cruces
Project: CLC Joint Superfund Process Center - Monthly

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26754** RunNo: **26754**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797310** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	111	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26777** RunNo: **26777**
Prep Date: Analysis Date: **6/11/2015** SeqNo: **798456** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromoform	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26777** RunNo: **26777**
Prep Date: Analysis Date: **6/11/2015** SeqNo: **798458** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26777** RunNo: **26777**
Prep Date: Analysis Date: **6/11/2015** SeqNo: **798468** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromoform	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		109	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506246**
12-Jun-15

Client: City of Las Cruces
Project: CLC Joint Superfund Process Center - Monthly

Sample ID	**100ng lcs2**	SampType:	**LCS**	TestCode:	**EPA Method 8260B: VOLATILES**
Client ID:	**LCSW**	Batch ID:	**R26777**	RunNo:	**26777**
Prep Date:		Analysis Date:	**6/11/2015**	SeqNo:	**798470** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1506246 RcptNo: 1

Received by/date: LM 06/04/15

Logged By: Celina Sessa 6/4/2015 9:00:00 AM Celina Sessa

Completed By: Celina Sessa 6/4/2015 3:00:30 PM Celina Sessa

Reviewed By: AT 06/05/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: JOINT SUPERFUND Process Center - Monthly Samples

Project #: CLC-JSP 621665-WALNUT

Project Manager: Luis Guerra lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1506246	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/3/15	0926	Drink H2O	CLC27-150603	3-40ml	HgCl2	-001										X						
6/3/15	0927	Drink H2O	CLC27-150603 DUPE	3-40ml	HgCl2	-002										X						
6/3/15	0940	Drink H2O	CLC18-150603	3-40ml	HgCl2	-003										X						
6/3/15	0947	Drink H2O	IS1-150603	3-40ml	HgCl2	-004										X						
6/3/15	0955	Drink H2O	C1-150603	3-40ml	HgCl2	-005										X						
6/3/15	1000	Drink H2O	C2-150603	3-40ml	HgCl2	-006										X						
6/3/15	1004	Drink H2O	ES1-150603	3-40ml	HgCl2	-007										X						
6/3/15	unk	Lab H2O	TRIP BLANK	2-40ml	HgCl2	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/3/15	1420	Laura Montoya	[signature]	06/04/15	0900 ~~1000~~
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 12, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: CLC Joint Superfund Process Center - Monthly Samples OrderNo.: 1506247

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/4/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1506247**
Date Reported: **6/12/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:13:00 AM
Lab ID: 1506247-001
Matrix: AIR
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Toluene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Ethylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Naphthalene	ND	0.20		µg/L	1	6/11/2015 11:07:02 AM	R26779
1-Methylnaphthalene	ND	0.40		µg/L	1	6/11/2015 11:07:02 AM	R26779
2-Methylnaphthalene	ND	0.40		µg/L	1	6/11/2015 11:07:02 AM	R26779
Acetone	ND	1.0		µg/L	1	6/11/2015 11:07:02 AM	R26779
Bromobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Bromodichloromethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Bromoform	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Bromomethane	ND	0.20		µg/L	1	6/11/2015 11:07:02 AM	R26779
2-Butanone	ND	1.0		µg/L	1	6/11/2015 11:07:02 AM	R26779
Carbon disulfide	ND	1.0		µg/L	1	6/11/2015 11:07:02 AM	R26779
Carbon tetrachloride	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Chlorobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Chloroethane	ND	0.20		µg/L	1	6/11/2015 11:07:02 AM	R26779
Chloroform	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Chloromethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
2-Chlorotoluene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
4-Chlorotoluene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
cis-1,2-DCE	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	6/11/2015 11:07:02 AM	R26779
Dibromochloromethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Dibromomethane	ND	0.20		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2-Dichlorobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,3-Dichlorobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,4-Dichlorobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Dichlorodifluoromethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,1-Dichloroethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,1-Dichloroethene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2-Dichloropropane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,3-Dichloropropane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
2,2-Dichloropropane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:13:00 AM
Lab ID: 1506247-001
Matrix: AIR
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Hexachlorobutadiene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
2-Hexanone	ND	1.0		µg/L	1	6/11/2015 11:07:02 AM	R26779
Isopropylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
4-Isopropyltoluene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
4-Methyl-2-pentanone	ND	1.0		µg/L	1	6/11/2015 11:07:02 AM	R26779
Methylene chloride	ND	0.30		µg/L	1	6/11/2015 11:07:02 AM	R26779
n-Butylbenzene	ND	0.30		µg/L	1	6/11/2015 11:07:02 AM	R26779
n-Propylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
sec-Butylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Styrene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
tert-Butylbenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
trans-1,2-DCE	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,1,1-Trichloroethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,1,2-Trichloroethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Trichloroethene (TCE)	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Trichlorofluoromethane	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
1,2,3-Trichloropropane	ND	0.20		µg/L	1	6/11/2015 11:07:02 AM	R26779
Vinyl chloride	ND	0.10		µg/L	1	6/11/2015 11:07:02 AM	R26779
Xylenes, Total	ND	0.15		µg/L	1	6/11/2015 11:07:02 AM	R26779
Surr: Dibromofluoromethane	93.4	70-130		%REC	1	6/11/2015 11:07:02 AM	R26779
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	1	6/11/2015 11:07:02 AM	R26779
Surr: Toluene-d8	103	70-130		%REC	1	6/11/2015 11:07:02 AM	R26779
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	1	6/11/2015 11:07:02 AM	R26779

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506247-002
Matrix: AIR
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Toluene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Ethylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Naphthalene	ND	0.20		µg/L	1	6/11/2015 12:02:30 PM	R26779
1-Methylnaphthalene	ND	0.40		µg/L	1	6/11/2015 12:02:30 PM	R26779
2-Methylnaphthalene	ND	0.40		µg/L	1	6/11/2015 12:02:30 PM	R26779
Acetone	ND	1.0		µg/L	1	6/11/2015 12:02:30 PM	R26779
Bromobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Bromodichloromethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Bromoform	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Bromomethane	ND	0.20		µg/L	1	6/11/2015 12:02:30 PM	R26779
2-Butanone	ND	1.0		µg/L	1	6/11/2015 12:02:30 PM	R26779
Carbon disulfide	ND	1.0		µg/L	1	6/11/2015 12:02:30 PM	R26779
Carbon tetrachloride	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Chlorobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Chloroethane	ND	0.20		µg/L	1	6/11/2015 12:02:30 PM	R26779
Chloroform	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Chloromethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
2-Chlorotoluene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
4-Chlorotoluene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
cis-1,2-DCE	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	6/11/2015 12:02:30 PM	R26779
Dibromochloromethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Dibromomethane	ND	0.20		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2-Dichlorobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,3-Dichlorobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,4-Dichlorobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Dichlorodifluoromethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,1-Dichloroethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,1-Dichloroethene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2-Dichloropropane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,3-Dichloropropane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
2,2-Dichloropropane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779

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CLIENT: City of Las Cruces
Client Sample ID: AS2-150603
Project: CLC Joint Superfund Process Center - M
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506247-002
Matrix: AIR
Received Date: 6/4/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Hexachlorobutadiene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
2-Hexanone	ND	1.0		µg/L	1	6/11/2015 12:02:30 PM	R26779
Isopropylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
4-Isopropyltoluene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
4-Methyl-2-pentanone	ND	1.0		µg/L	1	6/11/2015 12:02:30 PM	R26779
Methylene chloride	ND	0.30		µg/L	1	6/11/2015 12:02:30 PM	R26779
n-Butylbenzene	ND	0.30		µg/L	1	6/11/2015 12:02:30 PM	R26779
n-Propylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
sec-Butylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Styrene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
tert-Butylbenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
trans-1,2-DCE	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,1,1-Trichloroethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,1,2-Trichloroethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Trichloroethene (TCE)	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Trichlorofluoromethane	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
1,2,3-Trichloropropane	ND	0.20		µg/L	1	6/11/2015 12:02:30 PM	R26779
Vinyl chloride	ND	0.10		µg/L	1	6/11/2015 12:02:30 PM	R26779
Xylenes, Total	ND	0.15		µg/L	1	6/11/2015 12:02:30 PM	R26779
Surr: Dibromofluoromethane	102	70-130		%REC	1	6/11/2015 12:02:30 PM	R26779
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	6/11/2015 12:02:30 PM	R26779
Surr: Toluene-d8	102	70-130		%REC	1	6/11/2015 12:02:30 PM	R26779
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/11/2015 12:02:30 PM	R26779

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1506247 RcptNo: 1

Received by/date: JA 06/04/15

Logged By: Celina Sessa 6/4/2015 9:00:00 AM Celina Sessa

Completed By: Celina Sessa 6/4/2015 3:08:49 PM Celina Sessa

Reviewed By: 06/04/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Joint Superfund Process Center - Monthly Samples

Project #: CLC-JSP
621665-WALNUT

Project Manager: Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1506247	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B ~~(VOA)~~ VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/3/15	(10:13) 1013	AIR	AS1-150603	1 TEDLAR BAG	NONE	-001										X						
6/3/15	1015	AIR	AS2-150603	1 TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/3/15	1420	Laura Montoya	[illegible]	06/04/15	0900
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 09, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1507138

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/2/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1507138**
Date Reported: **7/9/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 10:08:00 AM
Lab ID: 1507138-001
Matrix: AIR
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Toluene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Ethylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Naphthalene	ND	0.20		µg/L	1	7/7/2015 12:44:39 PM	R27340
1-Methylnaphthalene	ND	0.40		µg/L	1	7/7/2015 12:44:39 PM	R27340
2-Methylnaphthalene	ND	0.40		µg/L	1	7/7/2015 12:44:39 PM	R27340
Acetone	ND	1.0		µg/L	1	7/7/2015 12:44:39 PM	R27340
Bromobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Bromodichloromethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Bromoform	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Bromomethane	ND	0.20		µg/L	1	7/7/2015 12:44:39 PM	R27340
2-Butanone	ND	1.0		µg/L	1	7/7/2015 12:44:39 PM	R27340
Carbon disulfide	ND	1.0		µg/L	1	7/7/2015 12:44:39 PM	R27340
Carbon tetrachloride	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Chlorobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Chloroethane	ND	0.20		µg/L	1	7/7/2015 12:44:39 PM	R27340
Chloroform	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Chloromethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
2-Chlorotoluene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
4-Chlorotoluene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
cis-1,2-DCE	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	7/7/2015 12:44:39 PM	R27340
Dibromochloromethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Dibromomethane	ND	0.20		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2-Dichlorobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,3-Dichlorobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,4-Dichlorobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Dichlorodifluoromethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,1-Dichloroethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,1-Dichloroethene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2-Dichloropropane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,3-Dichloropropane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
2,2-Dichloropropane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 10:08:00 AM
Lab ID: 1507138-001
Matrix: AIR
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Hexachlorobutadiene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
2-Hexanone	ND	1.0		µg/L	1	7/7/2015 12:44:39 PM	R27340
Isopropylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
4-Isopropyltoluene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
4-Methyl-2-pentanone	ND	1.0		µg/L	1	7/7/2015 12:44:39 PM	R27340
Methylene chloride	ND	0.30		µg/L	1	7/7/2015 12:44:39 PM	R27340
n-Butylbenzene	ND	0.30		µg/L	1	7/7/2015 12:44:39 PM	R27340
n-Propylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
sec-Butylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Styrene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
tert-Butylbenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
trans-1,2-DCE	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,1,1-Trichloroethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,1,2-Trichloroethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Trichloroethene (TCE)	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Trichlorofluoromethane	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
1,2,3-Trichloropropane	ND	0.20		µg/L	1	7/7/2015 12:44:39 PM	R27340
Vinyl chloride	ND	0.10		µg/L	1	7/7/2015 12:44:39 PM	R27340
Xylenes, Total	ND	0.15		µg/L	1	7/7/2015 12:44:39 PM	R27340
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/7/2015 12:44:39 PM	R27340
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	7/7/2015 12:44:39 PM	R27340
Surr: Toluene-d8	99.8	70-130		%REC	1	7/7/2015 12:44:39 PM	R27340
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	7/7/2015 12:44:39 PM	R27340

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 10:10:00 AM
Lab ID: 1507138-002
Matrix: AIR
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Toluene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Ethylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Naphthalene	ND	0.20		µg/L	1	7/7/2015 1:12:09 PM	R27340
1-Methylnaphthalene	ND	0.40		µg/L	1	7/7/2015 1:12:09 PM	R27340
2-Methylnaphthalene	ND	0.40		µg/L	1	7/7/2015 1:12:09 PM	R27340
Acetone	ND	1.0		µg/L	1	7/7/2015 1:12:09 PM	R27340
Bromobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Bromodichloromethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Bromoform	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Bromomethane	ND	0.20		µg/L	1	7/7/2015 1:12:09 PM	R27340
2-Butanone	ND	1.0		µg/L	1	7/7/2015 1:12:09 PM	R27340
Carbon disulfide	ND	1.0		µg/L	1	7/7/2015 1:12:09 PM	R27340
Carbon tetrachloride	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Chlorobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Chloroethane	ND	0.20		µg/L	1	7/7/2015 1:12:09 PM	R27340
Chloroform	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Chloromethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
2-Chlorotoluene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
4-Chlorotoluene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
cis-1,2-DCE	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	7/7/2015 1:12:09 PM	R27340
Dibromochloromethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Dibromomethane	ND	0.20		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2-Dichlorobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,3-Dichlorobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,4-Dichlorobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Dichlorodifluoromethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,1-Dichloroethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,1-Dichloroethene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2-Dichloropropane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,3-Dichloropropane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
2,2-Dichloropropane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 10:10:00 AM
Lab ID: 1507138-002
Matrix: AIR
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Hexachlorobutadiene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
2-Hexanone	ND	1.0		µg/L	1	7/7/2015 1:12:09 PM	R27340
Isopropylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
4-Isopropyltoluene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
4-Methyl-2-pentanone	ND	1.0		µg/L	1	7/7/2015 1:12:09 PM	R27340
Methylene chloride	ND	0.30		µg/L	1	7/7/2015 1:12:09 PM	R27340
n-Butylbenzene	ND	0.30		µg/L	1	7/7/2015 1:12:09 PM	R27340
n-Propylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
sec-Butylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Styrene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
tert-Butylbenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
trans-1,2-DCE	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,1,1-Trichloroethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,1,2-Trichloroethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Trichloroethene (TCE)	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Trichlorofluoromethane	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
1,2,3-Trichloropropane	ND	0.20		µg/L	1	7/7/2015 1:12:09 PM	R27340
Vinyl chloride	ND	0.10		µg/L	1	7/7/2015 1:12:09 PM	R27340
Xylenes, Total	ND	0.15		µg/L	1	7/7/2015 1:12:09 PM	R27340
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/7/2015 1:12:09 PM	R27340
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	7/7/2015 1:12:09 PM	R27340
Surr: Toluene-d8	101	70-130		%REC	1	7/7/2015 1:12:09 PM	R27340
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	7/7/2015 1:12:09 PM	R27340

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1507138 RcptNo: 1

Received by/date: JA 07/02/15

Logged By: **Lindsay Mangin** 7/2/2015 9:15:00 AM

Completed By: **Lindsay Mangin** 7/2/2015 2:40:48 PM

Reviewed By: JD 07/02/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3604

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Joint Superfund Process Center - Monthly Samples

Project #: CLC-JSP
GR1665-WALNUT

Project Manager: Luis Guerra
575-528-3609
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☐ Yes ☒ No

Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1507138	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
7/1/15	1008	AIR	AS1_150701	1 TEDLAR BAG	NONE	-001										X						
7/1/15	1010	AIR	AS2-150701	1 TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/1/15	1420	Laura Montoya	[illegible]	07/02/15	0915
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to:
Luis Guerra C/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 13, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1507139

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/2/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1507139**
Date Reported: **7/13/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC 27_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:29:00 AM
Lab ID: 1507139-001
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Toluene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Ethylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Naphthalene	ND	2.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Acetone	ND	10		µg/L	1	7/9/2015 11:37:22 PM	R27396
Bromobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Bromoform	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Bromomethane	ND	3.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
2-Butanone	ND	10		µg/L	1	7/9/2015 11:37:22 PM	R27396
Carbon disulfide	ND	10		µg/L	1	7/9/2015 11:37:22 PM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Chloroethane	ND	2.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Chloroform	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Chloromethane	ND	3.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2015 11:37:22 PM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

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Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
2-Hexanone	ND	10		µg/L	1	7/9/2015 11:37:22 PM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2015 11:37:22 PM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Styrene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Tetrachloroethene (PCE)	12	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/9/2015 11:37:22 PM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/9/2015 11:37:22 PM	R27396
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	7/9/2015 11:37:22 PM	R27396
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	1	7/9/2015 11:37:22 PM	R27396
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/9/2015 11:37:22 PM	R27396
Surr: Toluene-d8	97.5	70-130		%REC	1	7/9/2015 11:37:22 PM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC 18_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:38:00 AM
Lab ID: 1507139-002
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Toluene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Ethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Naphthalene	ND	2.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Acetone	ND	10		µg/L	1	7/10/2015 12:04:49 AM	R27396
Bromobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Bromoform	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Bromomethane	ND	3.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
2-Butanone	ND	10		µg/L	1	7/10/2015 12:04:49 AM	R27396
Carbon disulfide	ND	10		µg/L	1	7/10/2015 12:04:49 AM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Chloroethane	ND	2.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Chloroform	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Chloromethane	ND	3.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
4-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
cis-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Dibromochloromethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/10/2015 12:04:49 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: CLC 18_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:38:00 AM
Lab ID: 1507139-002
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
2-Hexanone	ND	10		µg/L	1	7/10/2015 12:04:49 AM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/10/2015 12:04:49 AM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Styrene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Tetrachloroethene (PCE)	12	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/10/2015 12:04:49 AM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/10/2015 12:04:49 AM	R27396
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	7/10/2015 12:04:49 AM	R27396
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	7/10/2015 12:04:49 AM	R27396
Surr: Dibromofluoromethane	98.7	70-130		%REC	1	7/10/2015 12:04:49 AM	R27396
Surr: Toluene-d8	98.9	70-130		%REC	1	7/10/2015 12:04:49 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:47:00 AM
Lab ID: 1507139-003
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
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Ethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
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1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Naphthalene	ND	2.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
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Bromobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Bromoform	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Bromomethane	ND	3.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
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Carbon disulfide	ND	10		µg/L	1	7/10/2015 12:32:17 AM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Chloroethane	ND	2.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Chloroform	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Chloromethane	ND	3.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
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cis-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Dibromochloromethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/10/2015 12:32:17 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:47:00 AM
Lab ID: 1507139-003
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
2-Hexanone	ND	10		µg/L	1	7/10/2015 12:32:17 AM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/10/2015 12:32:17 AM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Styrene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Tetrachloroethene (PCE)	11	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/10/2015 12:32:17 AM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/10/2015 12:32:17 AM	R27396
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/10/2015 12:32:17 AM	R27396
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	7/10/2015 12:32:17 AM	R27396
Surr: Dibromofluoromethane	100	70-130		%REC	1	7/10/2015 12:32:17 AM	R27396
Surr: Toluene-d8	99.6	70-130		%REC	1	7/10/2015 12:32:17 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:51:00 AM
Lab ID: 1507139-004
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Toluene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Ethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Naphthalene	ND	2.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Acetone	ND	10		µg/L	1	7/10/2015 12:59:47 AM	R27396
Bromobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Bromoform	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Bromomethane	ND	3.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
2-Butanone	ND	10		µg/L	1	7/10/2015 12:59:47 AM	R27396
Carbon disulfide	ND	10		µg/L	1	7/10/2015 12:59:47 AM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Chloroethane	ND	2.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Chloroform	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Chloromethane	ND	3.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
4-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
cis-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Dibromochloromethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/10/2015 12:59:47 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:51:00 AM
Lab ID: 1507139-004
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
2-Hexanone	ND	10		µg/L	1	7/10/2015 12:59:47 AM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/10/2015 12:59:47 AM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Styrene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/10/2015 12:59:47 AM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/10/2015 12:59:47 AM	R27396
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	7/10/2015 12:59:47 AM	R27396
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	7/10/2015 12:59:47 AM	R27396
Surr: Dibromofluoromethane	101	70-130		%REC	1	7/10/2015 12:59:47 AM	R27396
Surr: Toluene-d8	97.6	70-130		%REC	1	7/10/2015 12:59:47 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:54:00 AM
Lab ID: 1507139-005
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Toluene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Ethylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Naphthalene	ND	2.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Acetone	ND	10		µg/L	1	7/10/2015 1:27:20 AM	R27396
Bromobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Bromoform	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Bromomethane	ND	3.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
2-Butanone	ND	10		µg/L	1	7/10/2015 1:27:20 AM	R27396
Carbon disulfide	ND	10		µg/L	1	7/10/2015 1:27:20 AM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Chloroethane	ND	2.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Chloroform	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Chloromethane	ND	3.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
4-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
cis-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Dibromochloromethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/10/2015 1:27:20 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:54:00 AM
Lab ID: 1507139-005
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
2-Hexanone	ND	10		µg/L	1	7/10/2015 1:27:20 AM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/10/2015 1:27:20 AM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Styrene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/10/2015 1:27:20 AM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/10/2015 1:27:20 AM	R27396
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	1	7/10/2015 1:27:20 AM	R27396
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	7/10/2015 1:27:20 AM	R27396
Surr: Dibromofluoromethane	98.9	70-130		%REC	1	7/10/2015 1:27:20 AM	R27396
Surr: Toluene-d8	98.2	70-130		%REC	1	7/10/2015 1:27:20 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:58:00 AM
Lab ID: 1507139-006
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Toluene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Ethylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Naphthalene	ND	2.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Acetone	ND	10		µg/L	1	7/10/2015 1:54:50 AM	R27396
Bromobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Bromoform	6.4	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Bromomethane	ND	3.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
2-Butanone	ND	10		µg/L	1	7/10/2015 1:54:50 AM	R27396
Carbon disulfide	ND	10		µg/L	1	7/10/2015 1:54:50 AM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Chloroethane	ND	2.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Chloroform	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Chloromethane	ND	3.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
4-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
cis-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Dibromochloromethane	2.8	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/10/2015 1:54:50 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150701
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:58:00 AM
Lab ID: 1507139-006
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
2-Hexanone	ND	10		µg/L	1	7/10/2015 1:54:50 AM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/10/2015 1:54:50 AM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Styrene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/10/2015 1:54:50 AM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/10/2015 1:54:50 AM	R27396
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%REC	1	7/10/2015 1:54:50 AM	R27396
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	7/10/2015 1:54:50 AM	R27396
Surr: Dibromofluoromethane	101	70-130		%REC	1	7/10/2015 1:54:50 AM	R27396
Surr: Toluene-d8	97.1	70-130		%REC	1	7/10/2015 1:54:50 AM	R27396

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150701 DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:59:00 AM
Lab ID: 1507139-007
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Toluene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Ethylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Naphthalene	ND	2.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
2-Methylnaphthalene	ND	4.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Acetone	ND	10		µg/L	1	7/10/2015 2:22:18 AM	R27396
Bromobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Bromodichloromethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Bromoform	8.9	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Bromomethane	ND	3.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
2-Butanone	ND	10		µg/L	1	7/10/2015 2:22:18 AM	R27396
Carbon disulfide	ND	10		µg/L	1	7/10/2015 2:22:18 AM	R27396
Carbon Tetrachloride	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Chlorobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Chloroethane	ND	2.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Chloroform	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Chloromethane	ND	3.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
2-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
4-Chlorotoluene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
cis-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Dibromochloromethane	2.6	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Dibromomethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,1-Dichloroethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,1-Dichloroethene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,3-Dichloropropane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
2,2-Dichloropropane	ND	2.0		µg/L	1	7/10/2015 2:22:18 AM	R27396

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150701 DUPE
Project: Joint Superfund Process Center-Monthly
Collection Date: 7/1/2015 9:59:00 AM
Lab ID: 1507139-007
Matrix: AQUEOUS
Received Date: 7/2/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Hexachlorobutadiene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
2-Hexanone	ND	10		µg/L	1	7/10/2015 2:22:18 AM	R27396
Isopropylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
4-Isopropyltoluene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
4-Methyl-2-pentanone	ND	10		µg/L	1	7/10/2015 2:22:18 AM	R27396
Methylene Chloride	ND	3.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
n-Butylbenzene	ND	3.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
n-Propylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
sec-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Styrene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
tert-Butylbenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
trans-1,2-DCE	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Trichlorofluoromethane	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Vinyl chloride	ND	1.0		µg/L	1	7/10/2015 2:22:18 AM	R27396
Xylenes, Total	ND	1.5		µg/L	1	7/10/2015 2:22:18 AM	R27396
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	1	7/10/2015 2:22:18 AM	R27396
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	7/10/2015 2:22:18 AM	R27396
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/10/2015 2:22:18 AM	R27396
Surr: Toluene-d8	98.3	70-130		%REC	1	7/10/2015 2:22:18 AM	R27396

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1507139**
13-Jul-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R27396**	RunNo: **27396**			
Prep Date:	Analysis Date: **7/9/2015**	SeqNo: **821896**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1507139**
13-Jul-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R27396** RunNo: **27396**
Prep Date: Analysis Date: **7/9/2015** SeqNo: **821896** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.9		10.00		99.2	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R27396** RunNo: **27396**
Prep Date: Analysis Date: **7/9/2015** SeqNo: **821899** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	21	1.0	20.00	0	105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1507139**
13-Jul-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R27396**	RunNo: **27396**			
Prep Date:	Analysis Date: **7/9/2015**	SeqNo: **821899**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	111	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.9	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1507139 RcptNo: 1

Received by/date: SA 07/02/15

Logged By: **Lindsay Mangin** 7/2/2015 9:15:00 AM

Completed By: **Lindsay Mangin** 7/2/2015 2:45:06 PM

Reviewed By: MG 07/06/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3604 (LAB#)

email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Joint Superfund Process Center-Monthly Samples

Project #: CLC-JSP
GR1665-WALNUT

Project Manager: 575-528-3609
Luis Guerra
lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1507B9	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
7/1/15	9:29	Drink H2O	CLC27_150701	3-40ml	HgCl2	-001										X						
	9:38	Drink H2O	CLC18_150701	3-40ml	HgCl2	-002										X						
	9:47	Drink H2O	IS1_150701	3-40ml	HgCl2	-003										X						
	9:51	Drink H2O	C1_150701	3-40ml	HgCl2	-004										X						
	9:54	Drink H2O	C2_150701	3-40ml	HgCl2	-005										X						
	9:58	Drink H2O	ES1_150701	3-40ml	HgCl2	-006										X						
7/1/15	9:59	Drink H2O	ES1_150701 DUPE	3-40ml	HgCl2	-007										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/1/15	1420	Laura Montoya / Laura Montoya	[signature]	07/02/15	0915
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to:
Luis Guerra C/o City of Las Cruces.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 19, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfunds (JSP) Process Center-Monthly Samples OrderNo.: 1508587

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/12/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1508587**
Date Reported: **8/19/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150811
Project: Joint Superfunds (JSP) Process Center-M
Collection Date: 8/11/2015 10:18:00 AM
Lab ID: 1508587-001
Matrix: AIR
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Toluene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Ethylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Naphthalene	ND	0.20		µg/L	1	8/14/2015 1:03:29 PM	a28204
1-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2015 1:03:29 PM	a28204
2-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2015 1:03:29 PM	a28204
Acetone	ND	1.0		µg/L	1	8/14/2015 1:03:29 PM	a28204
Bromobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Bromodichloromethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Bromoform	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Bromomethane	ND	0.20		µg/L	1	8/14/2015 1:03:29 PM	a28204
2-Butanone	ND	1.0		µg/L	1	8/14/2015 1:03:29 PM	a28204
Carbon disulfide	ND	1.0		µg/L	1	8/14/2015 1:03:29 PM	a28204
Carbon tetrachloride	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Chlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Chloroethane	ND	0.20		µg/L	1	8/14/2015 1:03:29 PM	a28204
Chloroform	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Chloromethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
2-Chlorotoluene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
4-Chlorotoluene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
cis-1,2-DCE	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	8/14/2015 1:03:29 PM	a28204
Dibromochloromethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Dibromomethane	ND	0.20		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,3-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,4-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Dichlorodifluoromethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,1-Dichloroethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,1-Dichloroethene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,3-Dichloropropane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
2,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150811
Project: Joint Superfunds (JSP) Process Center-M
Collection Date: 8/11/2015 10:18:00 AM
Lab ID: 1508587-001
Matrix: AIR
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Hexachlorobutadiene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
2-Hexanone	ND	1.0		µg/L	1	8/14/2015 1:03:29 PM	a28204
Isopropylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
4-Isopropyltoluene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
4-Methyl-2-pentanone	ND	1.0		µg/L	1	8/14/2015 1:03:29 PM	a28204
Methylene chloride	ND	0.30		µg/L	1	8/14/2015 1:03:29 PM	a28204
n-Butylbenzene	ND	0.30		µg/L	1	8/14/2015 1:03:29 PM	a28204
n-Propylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
sec-Butylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Styrene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
tert-Butylbenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
trans-1,2-DCE	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,1,1-Trichloroethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,1,2-Trichloroethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Trichloroethene (TCE)	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Trichlorofluoromethane	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
1,2,3-Trichloropropane	ND	0.20		µg/L	1	8/14/2015 1:03:29 PM	a28204
Vinyl chloride	ND	0.10		µg/L	1	8/14/2015 1:03:29 PM	a28204
Xylenes, Total	ND	0.15		µg/L	1	8/14/2015 1:03:29 PM	a28204
Surr: Dibromofluoromethane	107	70-130		%REC	1	8/14/2015 1:03:29 PM	a28204
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	8/14/2015 1:03:29 PM	a28204
Surr: Toluene-d8	98.9	70-130		%REC	1	8/14/2015 1:03:29 PM	a28204
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	8/14/2015 1:03:29 PM	a28204

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150811
Project: Joint Superfunds (JSP) Process Center-M
Collection Date: 8/11/2015 10:22:00 AM
Lab ID: 1508587-002
Matrix: AIR
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Toluene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Ethylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Naphthalene	ND	0.20		µg/L	1	8/14/2015 1:58:46 PM	a28204
1-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2015 1:58:46 PM	a28204
2-Methylnaphthalene	ND	0.40		µg/L	1	8/14/2015 1:58:46 PM	a28204
Acetone	ND	1.0		µg/L	1	8/14/2015 1:58:46 PM	a28204
Bromobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Bromodichloromethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Bromoform	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Bromomethane	ND	0.20		µg/L	1	8/14/2015 1:58:46 PM	a28204
2-Butanone	ND	1.0		µg/L	1	8/14/2015 1:58:46 PM	a28204
Carbon disulfide	ND	1.0		µg/L	1	8/14/2015 1:58:46 PM	a28204
Carbon tetrachloride	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Chlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Chloroethane	ND	0.20		µg/L	1	8/14/2015 1:58:46 PM	a28204
Chloroform	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Chloromethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
2-Chlorotoluene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
4-Chlorotoluene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
cis-1,2-DCE	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	8/14/2015 1:58:46 PM	a28204
Dibromochloromethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Dibromomethane	ND	0.20		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,3-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,4-Dichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Dichlorodifluoromethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,1-Dichloroethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,1-Dichloroethene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,3-Dichloropropane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
2,2-Dichloropropane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150811
Project: Joint Superfunds (JSP) Process Center-M
Collection Date: 8/11/2015 10:22:00 AM
Lab ID: 1508587-002
Matrix: AIR
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Hexachlorobutadiene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
2-Hexanone	ND	1.0		µg/L	1	8/14/2015 1:58:46 PM	a28204
Isopropylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
4-Isopropyltoluene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
4-Methyl-2-pentanone	ND	1.0		µg/L	1	8/14/2015 1:58:46 PM	a28204
Methylene chloride	ND	0.30		µg/L	1	8/14/2015 1:58:46 PM	a28204
n-Butylbenzene	ND	0.30		µg/L	1	8/14/2015 1:58:46 PM	a28204
n-Propylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
sec-Butylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Styrene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
tert-Butylbenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Tetrachloroethene (PCE)	0.11	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
trans-1,2-DCE	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,1,1-Trichloroethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,1,2-Trichloroethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Trichloroethene (TCE)	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Trichlorofluoromethane	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
1,2,3-Trichloropropane	ND	0.20		µg/L	1	8/14/2015 1:58:46 PM	a28204
Vinyl chloride	ND	0.10		µg/L	1	8/14/2015 1:58:46 PM	a28204
Xylenes, Total	ND	0.15		µg/L	1	8/14/2015 1:58:46 PM	a28204
Surr: Dibromofluoromethane	118	70-130		%REC	1	8/14/2015 1:58:46 PM	a28204
Surr: 1,2-Dichloroethane-d4	108	70-130		%REC	1	8/14/2015 1:58:46 PM	a28204
Surr: Toluene-d8	99.3	70-130		%REC	1	8/14/2015 1:58:46 PM	a28204
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	8/14/2015 1:58:46 PM	a28204

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1508587** RcptNo: 1

Received by/date: 08/12/15

Logged By: **Ashley Gallegos** **8/12/2015 8:50:00 AM**

Completed By: **Ashley Gallegos** **8/12/2015 6:26:41 PM**

Reviewed By: CS 08/13/15 CS 08/13/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? UPS

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. BOX 20000
LAS CRUCES, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: Joint Superfund (JSP) Process Center - Monthly Samples
Project #: CLC-JSP "GRIGGS-WALNUT"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☐ Yes ☒ No
Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1508587	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
8/11/15	1018	AIR	AS1_150811	1 TEDLAR BAG	NONE	-001										X						
8/11/15	1022	AIR	AS2-150811	1 TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/11/15	1500	Laura Montoya	[signature]	08/12/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 17, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Project (JSP) Process Center-Monthly Sample OrderNo.: 1508588

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/12/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1508588**
Date Reported: **8/17/2015**

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:18:00 AM
Lab ID: 1508588-001
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Toluene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Naphthalene	ND	2.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Acetone	ND	10		µg/L	1	8/14/2015 12:33:11 AM	R28198
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Bromodichloromethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Bromoform	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Bromomethane	ND	3.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
2-Butanone	ND	10		µg/L	1	8/14/2015 12:33:11 AM	R28198
Carbon disulfide	ND	10		µg/L	1	8/14/2015 12:33:11 AM	R28198
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Chloroethane	ND	2.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Chloroform	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Chloromethane	ND	3.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Dibromochloromethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 12:33:11 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:18:00 AM
Lab ID: 1508588-001
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
2-Hexanone	ND	10		µg/L	1	8/14/2015 12:33:11 AM	R28198
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 12:33:11 AM	R28198
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Styrene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Tetrachloroethene (PCE)	14	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 12:33:11 AM	R28198
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 12:33:11 AM	R28198
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	8/14/2015 12:33:11 AM	R28198
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	8/14/2015 12:33:11 AM	R28198
Surr: Dibromofluoromethane	94.1	70-130		%REC	1	8/14/2015 12:33:11 AM	R28198
Surr: Toluene-d8	108	70-130		%REC	1	8/14/2015 12:33:11 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:40:00 AM
Lab ID: 1508588-002
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Toluene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Naphthalene	ND	2.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Acetone	ND	10		µg/L	1	8/14/2015 1:01:52 AM	R28198
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Bromodichloromethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Bromoform	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Bromomethane	ND	3.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
2-Butanone	ND	10		µg/L	1	8/14/2015 1:01:52 AM	R28198
Carbon disulfide	ND	10		µg/L	1	8/14/2015 1:01:52 AM	R28198
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Chloroethane	ND	2.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Chloroform	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Chloromethane	ND	3.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Dibromochloromethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 1:01:52 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:40:00 AM
Lab ID: 1508588-002
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
2-Hexanone	ND	10		µg/L	1	8/14/2015 1:01:52 AM	R28198
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 1:01:52 AM	R28198
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Styrene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Tetrachloroethene (PCE)	10	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 1:01:52 AM	R28198
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 1:01:52 AM	R28198
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%REC	1	8/14/2015 1:01:52 AM	R28198
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	8/14/2015 1:01:52 AM	R28198
Surr: Dibromofluoromethane	96.3	70-130		%REC	1	8/14/2015 1:01:52 AM	R28198
Surr: Toluene-d8	103	70-130		%REC	1	8/14/2015 1:01:52 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:53:00 AM
Lab ID: 1508588-003
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Toluene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Naphthalene	ND	2.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Acetone	ND	10		µg/L	1	8/14/2015 1:30:41 AM	R28198
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Bromodichloromethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Bromoform	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Bromomethane	ND	3.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
2-Butanone	ND	10		µg/L	1	8/14/2015 1:30:41 AM	R28198
Carbon disulfide	ND	10		µg/L	1	8/14/2015 1:30:41 AM	R28198
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Chloroethane	ND	2.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Chloroform	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Chloromethane	ND	3.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Dibromochloromethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 1:30:41 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:53:00 AM
Lab ID: 1508588-003
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
2-Hexanone	ND	10		µg/L	1	8/14/2015 1:30:41 AM	R28198
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 1:30:41 AM	R28198
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Styrene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Tetrachloroethene (PCE)	13	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 1:30:41 AM	R28198
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 1:30:41 AM	R28198
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	8/14/2015 1:30:41 AM	R28198
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	8/14/2015 1:30:41 AM	R28198
Surr: Dibromofluoromethane	97.3	70-130		%REC	1	8/14/2015 1:30:41 AM	R28198
Surr: Toluene-d8	103	70-130		%REC	1	8/14/2015 1:30:41 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:59:00 AM
Lab ID: 1508588-004
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Toluene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Naphthalene	ND	2.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Acetone	ND	10		µg/L	1	8/14/2015 1:59:33 AM	R28198
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Bromodichloromethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Bromoform	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Bromomethane	ND	3.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
2-Butanone	ND	10		µg/L	1	8/14/2015 1:59:33 AM	R28198
Carbon disulfide	ND	10		µg/L	1	8/14/2015 1:59:33 AM	R28198
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Chloroethane	ND	2.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Chloroform	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Chloromethane	ND	3.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Dibromochloromethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 1:59:33 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 9:59:00 AM
Lab ID: 1508588-004
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
2-Hexanone	ND	10		µg/L	1	8/14/2015 1:59:33 AM	R28198
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 1:59:33 AM	R28198
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Styrene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 1:59:33 AM	R28198
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 1:59:33 AM	R28198
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	8/14/2015 1:59:33 AM	R28198
Surr: 4-Bromofluorobenzene	112	70-130		%REC	1	8/14/2015 1:59:33 AM	R28198
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	8/14/2015 1:59:33 AM	R28198
Surr: Toluene-d8	103	70-130		%REC	1	8/14/2015 1:59:33 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150811DUPE
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 10:00:00 AM
Lab ID: 1508588-005
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Toluene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Naphthalene	ND	2.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Acetone	ND	10		µg/L	1	8/14/2015 2:28:21 AM	R28198
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Bromodichloromethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Bromoform	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Bromomethane	ND	3.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
2-Butanone	ND	10		µg/L	1	8/14/2015 2:28:21 AM	R28198
Carbon disulfide	ND	10		µg/L	1	8/14/2015 2:28:21 AM	R28198
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Chloroethane	ND	2.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Chloroform	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Chloromethane	ND	3.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Dibromochloromethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 2:28:21 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150811DUPE
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 10:00:00 AM
Lab ID: 1508588-005
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
2-Hexanone	ND	10		µg/L	1	8/14/2015 2:28:21 AM	R28198
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 2:28:21 AM	R28198
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Styrene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 2:28:21 AM	R28198
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 2:28:21 AM	R28198
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	1	8/14/2015 2:28:21 AM	R28198
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	8/14/2015 2:28:21 AM	R28198
Surr: Dibromofluoromethane	93.2	70-130		%REC	1	8/14/2015 2:28:21 AM	R28198
Surr: Toluene-d8	105	70-130		%REC	1	8/14/2015 2:28:21 AM	R28198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 10:06:00 AM
Lab ID: 1508588-006
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Toluene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Naphthalene	ND	2.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Acetone	ND	10		µg/L	1	8/14/2015 1:08:32 PM	R28245
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Bromodichloromethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Bromoform	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Bromomethane	ND	3.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
2-Butanone	ND	10		µg/L	1	8/14/2015 1:08:32 PM	R28245
Carbon disulfide	ND	10		µg/L	1	8/14/2015 1:08:32 PM	R28245
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Chloroethane	ND	2.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Chloroform	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Chloromethane	ND	3.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Dibromochloromethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 1:08:32 PM	R28245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 10:06:00 AM
Lab ID: 1508588-006
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
2-Hexanone	ND	10		µg/L	1	8/14/2015 1:08:32 PM	R28245
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 1:08:32 PM	R28245
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Styrene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 1:08:32 PM	R28245
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 1:08:32 PM	R28245
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%REC	1	8/14/2015 1:08:32 PM	R28245
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	8/14/2015 1:08:32 PM	R28245
Surr: Dibromofluoromethane	100	70-130		%REC	1	8/14/2015 1:08:32 PM	R28245
Surr: Toluene-d8	103	70-130		%REC	1	8/14/2015 1:08:32 PM	R28245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 10:10:00 AM
Lab ID: 1508588-007
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Toluene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Ethylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Naphthalene	ND	2.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
2-Methylnaphthalene	ND	4.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Acetone	ND	10		µg/L	1	8/14/2015 2:34:51 PM	R28245
Bromobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Bromodichloromethane	5.0	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Bromoform	4.5	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Bromomethane	ND	3.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
2-Butanone	ND	10		µg/L	1	8/14/2015 2:34:51 PM	R28245
Carbon disulfide	ND	10		µg/L	1	8/14/2015 2:34:51 PM	R28245
Carbon Tetrachloride	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Chlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Chloroethane	ND	2.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Chloroform	3.8	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Chloromethane	ND	3.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
2-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
4-Chlorotoluene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
cis-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Dibromochloromethane	7.1	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Dibromomethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,1-Dichloroethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,1-Dichloroethene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,3-Dichloropropane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
2,2-Dichloropropane	ND	2.0		µg/L	1	8/14/2015 2:34:51 PM	R28245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150811
Project: Joint Superfund Project (JSP) Process Ce
Collection Date: 8/11/2015 10:10:00 AM
Lab ID: 1508588-007
Matrix: AQUEOUS
Received Date: 8/12/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Hexachlorobutadiene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
2-Hexanone	ND	10		µg/L	1	8/14/2015 2:34:51 PM	R28245
Isopropylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
4-Isopropyltoluene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
4-Methyl-2-pentanone	ND	10		µg/L	1	8/14/2015 2:34:51 PM	R28245
Methylene Chloride	ND	3.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
n-Butylbenzene	ND	3.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
n-Propylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
sec-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Styrene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
tert-Butylbenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
trans-1,2-DCE	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Trichlorofluoromethane	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Vinyl chloride	ND	1.0		µg/L	1	8/14/2015 2:34:51 PM	R28245
Xylenes, Total	ND	1.5		µg/L	1	8/14/2015 2:34:51 PM	R28245
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%REC	1	8/14/2015 2:34:51 PM	R28245
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	8/14/2015 2:34:51 PM	R28245
Surr: Dibromofluoromethane	97.9	70-130		%REC	1	8/14/2015 2:34:51 PM	R28245
Surr: Toluene-d8	103	70-130		%REC	1	8/14/2015 2:34:51 PM	R28245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**
17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R28198** RunNo: **28198**
Prep Date: Analysis Date: **8/13/2015** SeqNo: **849774** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.3	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	92.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R28198** RunNo: **28198**
Prep Date: Analysis Date: **8/13/2015** SeqNo: **849775** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**
17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R28198**	RunNo: **28198**			
Prep Date:	Analysis Date: **8/13/2015**	SeqNo: **849775**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**
17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R28198** RunNo: **28198**
Prep Date: Analysis Date: **8/13/2015** SeqNo: **849775** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.5	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **100ng LCS** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R28245** RunNo: **28245**
Prep Date: Analysis Date: **8/14/2015** SeqNo: **852512** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	91.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R28245** RunNo: **28245**
Prep Date: Analysis Date: **8/14/2015** SeqNo: **852513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**
17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **rb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R28245**	RunNo: **28245**			
Prep Date:	Analysis Date: **8/14/2015**	SeqNo: **852513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**
17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R28245** RunNo: **28245**
Prep Date: Analysis Date: **8/14/2015** SeqNo: **852513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R28245** RunNo: **28245**
Prep Date: Analysis Date: **8/15/2015** SeqNo: **852622** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.7	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.9	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **rb4** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R28245** RunNo: **28245**
Prep Date: Analysis Date: **8/15/2015** SeqNo: **852633** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**
17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **rb4**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R28245**	RunNo: **28245**			
Prep Date:	Analysis Date: **8/15/2015**	SeqNo: **852633**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1508588**

17-Aug-15

Client: City of Las Cruces
Project: Joint Superfund Project (JSP) Process Center-M

Sample ID **rb4**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R28245**	RunNo: **28245**			
Prep Date:	Analysis Date: **8/15/2015**	SeqNo: **852633**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.2	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1508588** RcptNo: **1**

Received by/date: 08/12/15

Logged By: **Ashley Gallegos** **8/12/2015 8:50:00 AM**

Completed By: **Ashley Gallegos** **8/12/2015 6:31:20 PM**

Reviewed By: 08/12/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces Water Quality Lab
Mailing Address: P.O. Box 20000 Las Cruces, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☒ EDD (Type) EXCELL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Joint Superfund (JSP) Process Center - Monthly Samples
Project # CLC-JSP "Griggs Walnut"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1508588	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/15	0918	Drink H_2O	CLC 27-150811	3-40ml	$HgCl_2$	-001										X						
11/15	0940	Drink H_2O	CLC 18-150811	3-40ml	$HgCl_2$	-002										X						
11/15	0953	Drink H_2O	ESI-150811	3-40ml	$HgCl_2$	-003										X						
11/15	0959	Drink H_2O	C1-150811	3-40ml	$HgCl_2$	-004										X						
11/15	1000	Drink H_2O	C1-150811 DUPE	3-40ml	$HgCl_2$	-005										X						
11/15	10:06	Drink H_2O	C2-150811	3-40ml	$HgCl_2$	-006										X						
11/15	10:10	Drink H_2O	ESI-150811	3-40ml	$HgCl_2$	-007										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/11/15	1500	Laura Montoya		08/12/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 23, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund (JSP) Process Center-Monthly Samples OrderNo.: 1509505

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/11/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1509505**
Date Reported: **9/23/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 10:11:00 AM
Lab ID: 1509505-001
Matrix: AIR
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Toluene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Ethylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Naphthalene	ND	0.20		µg/L	1	9/22/2015 2:33:57 PM	R29039
1-Methylnaphthalene	ND	0.40		µg/L	1	9/22/2015 2:33:57 PM	R29039
2-Methylnaphthalene	ND	0.40		µg/L	1	9/22/2015 2:33:57 PM	R29039
Acetone	ND	1.0		µg/L	1	9/22/2015 2:33:57 PM	R29039
Bromobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Bromodichloromethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Bromoform	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Bromomethane	ND	0.20		µg/L	1	9/22/2015 2:33:57 PM	R29039
2-Butanone	ND	1.0		µg/L	1	9/22/2015 2:33:57 PM	R29039
Carbon disulfide	ND	1.0		µg/L	1	9/22/2015 2:33:57 PM	R29039
Carbon tetrachloride	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Chlorobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Chloroethane	ND	0.20		µg/L	1	9/22/2015 2:33:57 PM	R29039
Chloroform	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Chloromethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
2-Chlorotoluene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
4-Chlorotoluene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
cis-1,2-DCE	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/22/2015 2:33:57 PM	R29039
Dibromochloromethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Dibromomethane	ND	0.20		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,1-Dichloroethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,1-Dichloroethene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2-Dichloropropane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,3-Dichloropropane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
2,2-Dichloropropane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 10:11:00 AM
Lab ID: 1509505-001
Matrix: AIR
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Hexachlorobutadiene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
2-Hexanone	ND	1.0		µg/L	1	9/22/2015 2:33:57 PM	R29039
Isopropylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
4-Isopropyltoluene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/22/2015 2:33:57 PM	R29039
Methylene chloride	ND	0.30		µg/L	1	9/22/2015 2:33:57 PM	R29039
n-Butylbenzene	ND	0.30		µg/L	1	9/22/2015 2:33:57 PM	R29039
n-Propylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
sec-Butylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Styrene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
tert-Butylbenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
trans-1,2-DCE	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Trichlorofluoromethane	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/22/2015 2:33:57 PM	R29039
Vinyl chloride	ND	0.10		µg/L	1	9/22/2015 2:33:57 PM	R29039
Xylenes, Total	ND	0.15		µg/L	1	9/22/2015 2:33:57 PM	R29039
Surr: Dibromofluoromethane	96.8	70-130		%REC	1	9/22/2015 2:33:57 PM	R29039
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	9/22/2015 2:33:57 PM	R29039
Surr: Toluene-d8	98.5	70-130		%REC	1	9/22/2015 2:33:57 PM	R29039
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	1	9/22/2015 2:33:57 PM	R29039

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 10:15:00 AM
Lab ID: 1509505-002
Matrix: AIR
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Toluene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Ethylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Naphthalene	ND	0.20		µg/L	1	9/22/2015 3:31:29 PM	R29039
1-Methylnaphthalene	ND	0.40		µg/L	1	9/22/2015 3:31:29 PM	R29039
2-Methylnaphthalene	ND	0.40		µg/L	1	9/22/2015 3:31:29 PM	R29039
Acetone	ND	1.0		µg/L	1	9/22/2015 3:31:29 PM	R29039
Bromobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Bromodichloromethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Bromoform	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Bromomethane	ND	0.20		µg/L	1	9/22/2015 3:31:29 PM	R29039
2-Butanone	ND	1.0		µg/L	1	9/22/2015 3:31:29 PM	R29039
Carbon disulfide	ND	1.0		µg/L	1	9/22/2015 3:31:29 PM	R29039
Carbon tetrachloride	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Chlorobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Chloroethane	ND	0.20		µg/L	1	9/22/2015 3:31:29 PM	R29039
Chloroform	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Chloromethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
2-Chlorotoluene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
4-Chlorotoluene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
cis-1,2-DCE	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/22/2015 3:31:29 PM	R29039
Dibromochloromethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Dibromomethane	ND	0.20		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,1-Dichloroethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,1-Dichloroethene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2-Dichloropropane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,3-Dichloropropane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
2,2-Dichloropropane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 10:15:00 AM
Lab ID: 1509505-002
Matrix: AIR
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Hexachlorobutadiene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
2-Hexanone	ND	1.0		µg/L	1	9/22/2015 3:31:29 PM	R29039
Isopropylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
4-Isopropyltoluene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/22/2015 3:31:29 PM	R29039
Methylene chloride	ND	0.30		µg/L	1	9/22/2015 3:31:29 PM	R29039
n-Butylbenzene	ND	0.30		µg/L	1	9/22/2015 3:31:29 PM	R29039
n-Propylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
sec-Butylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Styrene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
tert-Butylbenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Tetrachloroethene (PCE)	0.11	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
trans-1,2-DCE	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Trichlorofluoromethane	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/22/2015 3:31:29 PM	R29039
Vinyl chloride	ND	0.10		µg/L	1	9/22/2015 3:31:29 PM	R29039
Xylenes, Total	ND	0.15		µg/L	1	9/22/2015 3:31:29 PM	R29039
Surr: Dibromofluoromethane	98.8	70-130		%REC	1	9/22/2015 3:31:29 PM	R29039
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	9/22/2015 3:31:29 PM	R29039
Surr: Toluene-d8	99.3	70-130		%REC	1	9/22/2015 3:31:29 PM	R29039
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	1	9/22/2015 3:31:29 PM	R29039

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1509505** RcptNo: 1

Received by/date: 09/11/15

Logged By: **Ashley Gallegos** **9/11/2015 10:00:00 AM**

Completed By: **Ashley Gallegos** **9/11/2015 1:25:31 PM**

Reviewed By: 09/11/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
LAS CRUCES, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: Joint Superfund (JSP) Process Center-Monthly Samples
Project #: CLC-JSP "16R166S-WALNUT"
Project Manager: Luis Guerra
575-528-3609
lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☐ Yes ☐ No
Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1509505	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
10/15	10:11	AIR	AS1_150910	1 TEDLAR BAG	None	-001										X						
10/15	10:15	AIR	AS2_150910	1 TEDLAR BAG	None	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date Time
10/15	1430	Laura Montoya	Amy Gallegos	09/11/15 1000
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
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Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 18, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund (JSP) Process Center-Monthly Samples OrderNo.: 1509525

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/11/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1509525**
Date Reported: **9/18/2015**

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:17:00 AM
Lab ID: 1509525-001
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 6:40:51 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 6:40:51 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 6:40:51 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 6:40:51 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:17:00 AM
Lab ID: 1509525-001
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 6:40:51 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 6:40:51 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Tetrachloroethene (PCE)	13	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 6:40:51 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 6:40:51 PM	R28882
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%REC	1	9/15/2015 6:40:51 PM	R28882
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	9/15/2015 6:40:51 PM	R28882
Surr: Dibromofluoromethane	98.8	70-130		%REC	1	9/15/2015 6:40:51 PM	R28882
Surr: Toluene-d8	96.4	70-130		%REC	1	9/15/2015 6:40:51 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:37:00 AM
Lab ID: 1509525-002
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 7:09:36 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 7:09:36 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 7:09:36 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 7:09:36 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:37:00 AM
Lab ID: 1509525-002
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 7:09:36 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 7:09:36 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Tetrachloroethene (PCE)	13	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 7:09:36 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 7:09:36 PM	R28882
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%REC	1	9/15/2015 7:09:36 PM	R28882
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	9/15/2015 7:09:36 PM	R28882
Surr: Dibromofluoromethane	96.1	70-130		%REC	1	9/15/2015 7:09:36 PM	R28882
Surr: Toluene-d8	97.9	70-130		%REC	1	9/15/2015 7:09:36 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:47:00 AM
Lab ID: 1509525-003
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 7:38:27 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 7:38:27 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 7:38:27 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 7:38:27 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:47:00 AM
Lab ID: 1509525-003
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 7:38:27 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 7:38:27 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Tetrachloroethene (PCE)	11	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 7:38:27 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 7:38:27 PM	R28882
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	9/15/2015 7:38:27 PM	R28882
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	9/15/2015 7:38:27 PM	R28882
Surr: Dibromofluoromethane	101	70-130		%REC	1	9/15/2015 7:38:27 PM	R28882
Surr: Toluene-d8	98.3	70-130		%REC	1	9/15/2015 7:38:27 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:51:00 AM
Lab ID: 1509525-004
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 8:07:08 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 8:07:08 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 8:07:08 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 8:07:08 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:51:00 AM
Lab ID: 1509525-004
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 8:07:08 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 8:07:08 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 8:07:08 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 8:07:08 PM	R28882
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%REC	1	9/15/2015 8:07:08 PM	R28882
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	9/15/2015 8:07:08 PM	R28882
Surr: Dibromofluoromethane	101	70-130		%REC	1	9/15/2015 8:07:08 PM	R28882
Surr: Toluene-d8	94.8	70-130		%REC	1	9/15/2015 8:07:08 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:55:00 AM
Lab ID: 1509525-005
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 8:35:56 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 8:35:56 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 8:35:56 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 8:35:56 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:55:00 AM
Lab ID: 1509525-005
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 8:35:56 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 8:35:56 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 8:35:56 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 8:35:56 PM	R28882
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	9/15/2015 8:35:56 PM	R28882
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	9/15/2015 8:35:56 PM	R28882
Surr: Dibromofluoromethane	97.6	70-130		%REC	1	9/15/2015 8:35:56 PM	R28882
Surr: Toluene-d8	94.5	70-130		%REC	1	9/15/2015 8:35:56 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150910 Dupe
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:56:00 AM
Lab ID: 1509525-006
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 9:04:41 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 9:04:41 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 9:04:41 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 9:04:41 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_150910 Dupe
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 9:56:00 AM
Lab ID: 1509525-006
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 9:04:41 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 9:04:41 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 9:04:41 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 9:04:41 PM	R28882
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	9/15/2015 9:04:41 PM	R28882
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	9/15/2015 9:04:41 PM	R28882
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	9/15/2015 9:04:41 PM	R28882
Surr: Toluene-d8	98.3	70-130		%REC	1	9/15/2015 9:04:41 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 10:00:00 AM
Lab ID: 1509525-007
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 9:33:21 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Bromodichloromethane	4.6	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Bromoform	4.4	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 9:33:21 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 9:33:21 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Chloroform	3.8	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Dibromochloromethane	6.7	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 9:33:21 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_150910
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 9/10/2015 10:00:00 AM
Lab ID: 1509525-007
Matrix: AQUEOUS
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 9:33:21 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 9:33:21 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 9:33:21 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 9:33:21 PM	R28882
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	1	9/15/2015 9:33:21 PM	R28882
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	9/15/2015 9:33:21 PM	R28882
Surr: Dibromofluoromethane	95.2	70-130		%REC	1	9/15/2015 9:33:21 PM	R28882
Surr: Toluene-d8	96.7	70-130		%REC	1	9/15/2015 9:33:21 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date:
Lab ID: 1509525-008
Matrix: TRIP BLANK
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Toluene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Ethylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Naphthalene	ND	2.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
2-Methylnaphthalene	ND	4.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Acetone	ND	10		µg/L	1	9/15/2015 10:02:02 PM	R28882
Bromobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Bromodichloromethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Bromoform	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Bromomethane	ND	3.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
2-Butanone	ND	10		µg/L	1	9/15/2015 10:02:02 PM	R28882
Carbon disulfide	ND	10		µg/L	1	9/15/2015 10:02:02 PM	R28882
Carbon Tetrachloride	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Chlorobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Chloroethane	ND	2.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Chloroform	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Chloromethane	ND	3.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
2-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
4-Chlorotoluene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
cis-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Dibromochloromethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Dibromomethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,1-Dichloroethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,1-Dichloroethene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,3-Dichloropropane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
2,2-Dichloropropane	ND	2.0		µg/L	1	9/15/2015 10:02:02 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date:
Lab ID: 1509525-008
Matrix: TRIP BLANK
Received Date: 9/11/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Hexachlorobutadiene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
2-Hexanone	ND	10		µg/L	1	9/15/2015 10:02:02 PM	R28882
Isopropylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
4-Isopropyltoluene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
4-Methyl-2-pentanone	ND	10		µg/L	1	9/15/2015 10:02:02 PM	R28882
Methylene Chloride	ND	3.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
n-Butylbenzene	ND	3.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
n-Propylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
sec-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Styrene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
tert-Butylbenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
trans-1,2-DCE	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Trichlorofluoromethane	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Vinyl chloride	ND	1.0		µg/L	1	9/15/2015 10:02:02 PM	R28882
Xylenes, Total	ND	1.5		µg/L	1	9/15/2015 10:02:02 PM	R28882
Surr: 1,2-Dichloroethane-d4	95.8	70-130		%REC	1	9/15/2015 10:02:02 PM	R28882
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	9/15/2015 10:02:02 PM	R28882
Surr: Dibromofluoromethane	95.5	70-130		%REC	1	9/15/2015 10:02:02 PM	R28882
Surr: Toluene-d8	97.5	70-130		%REC	1	9/15/2015 10:02:02 PM	R28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1509525**
18-Sep-15

Client: City of Las Cruces
Project: Joint Superfund (JSP) Process Center-Monthly S

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R28882** RunNo: **28882**
Prep Date: Analysis Date: **9/15/2015** SeqNo: **876228** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	116	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.9	70	130			
Surr: Toluene-d8	9.8		10.00		98.5	70	130			

Sample ID **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R28882** RunNo: **28882**
Prep Date: Analysis Date: **9/15/2015** SeqNo: **876231** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1509525**
18-Sep-15

Client: City of Las Cruces
Project: Joint Superfund (JSP) Process Center-Monthly S

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R28882**	RunNo: **28882**			
Prep Date:	Analysis Date: **9/15/2015**	SeqNo: **876231**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1509525**
18-Sep-15

Client: City of Las Cruces
Project: Joint Superfund (JSP) Process Center-Monthly S

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R28882**	RunNo: **28882**			
Prep Date:	Analysis Date: **9/15/2015**	SeqNo: **876231**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **City of Las Cruces** Work Order Number: **1509525** RcptNo: **1**

Received by/date: 09/11/15

Logged By: **Ashley Gallegos** **9/11/2015 10:00:00 AM**

Completed By: **Ashley Gallegos** **9/11/2015 2:52:18 PM**

Reviewed By: 09/11/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
Las Cruces,
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Joint Superfund (JSP) Process Center-Monthly Samples
Project #: CLC-JSP "GRUBS-WALNUT"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1509525	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
10/15	9:17	Drink H2O	CLC 27_150910	3-40ml	HgCl2	-001										X						
10/15	9:37	Drink H2O	CLC 18_150910	3-40ml	HgCl2	-002										X						
10/15	9:47	Drink H2O	ISI_150910	3-40ml	HgCl2	-003										X						
10/15	9:51	Drink H2O	C1_150910	3-40ml	HgCl2	-004										X						
10/15	9:55	Drink H2O	C2_150910	3-40ml	HgCl2	-005										X						
10/15	9:56	Drink H2O	C2-150910 Dupe	3-40ml	HgCl2	-006										X						
10/15	10:00	Drink H2O	ESI_150910	3-40ml	HgCl2	-007										X						
10/15	UNK	LAB H2O	TRIP BLANK	2-40ml	HgCl2	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
10/15	1430	Laura Montoya	A M Gallegos	09/11/15	1000	
Date:	Time:	Relinquished by:	Received by:	Date	Time	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 09, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Project Process Center-Monthly Samples OrderNo.: 1510289

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/7/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1510289**
Date Reported: **10/9/2015**

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:10:00 AM
Lab ID: 1510289-001
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 7:22:06 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 7:22:06 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 7:22:06 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 7:22:06 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:10:00 AM
Lab ID: 1510289-001
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 7:22:06 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 7:22:06 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Tetrachloroethene (PCE)	14	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 7:22:06 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 7:22:06 PM	R29384
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%REC	1	10/7/2015 7:22:06 PM	R29384
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/7/2015 7:22:06 PM	R29384
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	10/7/2015 7:22:06 PM	R29384
Surr: Toluene-d8	99.2	70-130		%REC	1	10/7/2015 7:22:06 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:35:00 AM
Lab ID: 1510289-002
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 8:48:23 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 8:48:23 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 8:48:23 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 8:48:23 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:35:00 AM
Lab ID: 1510289-002
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 8:48:23 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 8:48:23 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Tetrachloroethene (PCE)	15	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 8:48:23 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 8:48:23 PM	R29384
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	10/7/2015 8:48:23 PM	R29384
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	1	10/7/2015 8:48:23 PM	R29384
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	10/7/2015 8:48:23 PM	R29384
Surr: Toluene-d8	98.8	70-130		%REC	1	10/7/2015 8:48:23 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151006 DUPE
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:36:00 AM
Lab ID: 1510289-003
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 9:17:13 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 9:17:13 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 9:17:13 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 9:17:13 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151006 DUPE
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:36:00 AM
Lab ID: 1510289-003
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 9:17:13 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 9:17:13 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Tetrachloroethene (PCE)	15	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 9:17:13 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 9:17:13 PM	R29384
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	10/7/2015 9:17:13 PM	R29384
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	10/7/2015 9:17:13 PM	R29384
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	10/7/2015 9:17:13 PM	R29384
Surr: Toluene-d8	101	70-130		%REC	1	10/7/2015 9:17:13 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:49:00 AM
Lab ID: 1510289-004
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 9:45:57 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 9:45:57 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 9:45:57 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 9:45:57 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:49:00 AM
Lab ID: 1510289-004
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 9:45:57 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 9:45:57 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Tetrachloroethene (PCE)	12	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 9:45:57 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 9:45:57 PM	R29384
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	1	10/7/2015 9:45:57 PM	R29384
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	10/7/2015 9:45:57 PM	R29384
Surr: Dibromofluoromethane	99.6	70-130		%REC	1	10/7/2015 9:45:57 PM	R29384
Surr: Toluene-d8	102	70-130		%REC	1	10/7/2015 9:45:57 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:53:00 AM
Lab ID: 1510289-005
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 10:14:37 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 10:14:37 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 10:14:37 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 10:14:37 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:53:00 AM
Lab ID: 1510289-005
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 10:14:37 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 10:14:37 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 10:14:37 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 10:14:37 PM	R29384
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	10/7/2015 10:14:37 PM	R29384
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	10/7/2015 10:14:37 PM	R29384
Surr: Dibromofluoromethane	95.3	70-130		%REC	1	10/7/2015 10:14:37 PM	R29384
Surr: Toluene-d8	101	70-130		%REC	1	10/7/2015 10:14:37 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:57:00 AM
Lab ID: 1510289-006
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 10:43:21 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 10:43:21 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 10:43:21 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 10:43:21 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 9:57:00 AM
Lab ID: 1510289-006
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 10:43:21 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 10:43:21 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 10:43:21 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 10:43:21 PM	R29384
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/7/2015 10:43:21 PM	R29384
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/7/2015 10:43:21 PM	R29384
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	10/7/2015 10:43:21 PM	R29384
Surr: Toluene-d8	103	70-130		%REC	1	10/7/2015 10:43:21 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 10:01:00 AM
Lab ID: 1510289-007
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 11:12:07 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Bromodichloromethane	4.1	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Bromoform	2.6	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 11:12:07 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 11:12:07 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Chloroform	4.9	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Dibromochloromethane	4.7	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 11:12:07 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151006
Project: Joint Superfund Project Process Center-
Collection Date: 10/6/2015 10:01:00 AM
Lab ID: 1510289-007
Matrix: AQUEOUS
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 11:12:07 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 11:12:07 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 11:12:07 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 11:12:07 PM	R29384
Surr: 1,2-Dichloroethane-d4	86.9	70-130		%REC	1	10/7/2015 11:12:07 PM	R29384
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/7/2015 11:12:07 PM	R29384
Surr: Dibromofluoromethane	92.6	70-130		%REC	1	10/7/2015 11:12:07 PM	R29384
Surr: Toluene-d8	99.4	70-130		%REC	1	10/7/2015 11:12:07 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Joint Superfund Project Process Center-
Collection Date:
Lab ID: 1510289-008
Matrix: TRIP BLANK
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Toluene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Ethylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Naphthalene	ND	2.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
2-Methylnaphthalene	ND	4.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Acetone	ND	10		µg/L	1	10/7/2015 11:40:54 PM	R29384
Bromobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Bromodichloromethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Bromoform	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Bromomethane	ND	3.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
2-Butanone	ND	10		µg/L	1	10/7/2015 11:40:54 PM	R29384
Carbon disulfide	ND	10		µg/L	1	10/7/2015 11:40:54 PM	R29384
Carbon Tetrachloride	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Chlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Chloroethane	ND	2.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Chloroform	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Chloromethane	ND	3.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
2-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
4-Chlorotoluene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
cis-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Dibromochloromethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Dibromomethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,1-Dichloroethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,1-Dichloroethene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,3-Dichloropropane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
2,2-Dichloropropane	ND	2.0		µg/L	1	10/7/2015 11:40:54 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Joint Superfund Project Process Center-
Collection Date:
Lab ID: 1510289-008
Matrix: TRIP BLANK
Received Date: 10/7/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Hexachlorobutadiene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
2-Hexanone	ND	10		µg/L	1	10/7/2015 11:40:54 PM	R29384
Isopropylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
4-Isopropyltoluene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
4-Methyl-2-pentanone	ND	10		µg/L	1	10/7/2015 11:40:54 PM	R29384
Methylene Chloride	ND	3.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
n-Butylbenzene	ND	3.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
n-Propylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
sec-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Styrene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
tert-Butylbenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
trans-1,2-DCE	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Trichlorofluoromethane	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Vinyl chloride	ND	1.0		µg/L	1	10/7/2015 11:40:54 PM	R29384
Xylenes, Total	ND	1.5		µg/L	1	10/7/2015 11:40:54 PM	R29384
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/7/2015 11:40:54 PM	R29384
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/7/2015 11:40:54 PM	R29384
Surr: Dibromofluoromethane	93.9	70-130		%REC	1	10/7/2015 11:40:54 PM	R29384
Surr: Toluene-d8	99.5	70-130		%REC	1	10/7/2015 11:40:54 PM	R29384

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1510289**
09-Oct-15

Client: City of Las Cruces
Project: Joint Superfund Project Process Center-Monthly

Sample ID **rb3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R29384**	RunNo: **29384**			
Prep Date:	Analysis Date: **10/7/2015**	SeqNo: **893573**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1510289**
09-Oct-15

Client: City of Las Cruces
Project: Joint Superfund Project Process Center-Monthly

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R29384** RunNo: **29384**
Prep Date: Analysis Date: **10/7/2015** SeqNo: **893573** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID **100ng lcs3** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R29384** RunNo: **29384**
Prep Date: Analysis Date: **10/7/2015** SeqNo: **893600** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1510289**
09-Oct-15

Client: City of Las Cruces
Project: Joint Superfund Project Process Center-Monthly

Sample ID **100ng lcs3**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R29384**	RunNo: **29384**			
Prep Date:	Analysis Date: **10/7/2015**	SeqNo: **893600**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.8	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1510289 RcptNo: 1

Received by/date: 10/07/15

Logged By: **Lindsay Mangin** 10/7/2015 8:50:00 AM

Completed By: **Lindsay Mangin** 10/7/2015 9:49:32 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
Las Cruces, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: Joint Superfund (JSP) Process Center - Monthly Samples
Project #: CLC-JSP "6R166S-WALNUT"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.4-1.0 CF = 1.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1510289	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
10/06/15	09:10	Drink H_2O	CLC 27-151006	3-40ml	$HgCl_2$	-001										X						
10/06/15	09:35	Drink H_2O	CLC 18-151006	3-40ml	$HgCl_2$	-002										X						
10/06/15	09:36	Drink H_2O	CLC-18-151006 DUPE	3-40ml	$HgCl_2$	-003										X						
10/06/15	09:49	Drink H_2O	IS1-151006	3-40ml	$HgCl_2$	-004										X						
10/06/15	09:53	Drink H_2O	C1-151006	3-40ml	$HgCl_2$	-005										X						
10/06/15	09:57	Drink H_2O	C2-151006	3-40ml	$HgCl_2$	-006										X						
10/06/15	10:01	Drink H_2O	ES1-151006	3-40ml	$HgCl_2$	-007										X						
10/06/15	UNK	LAB H_2O	TRIP BLANK	2-40ml	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/06/15	1500	Laura Montoya	[signature]	10/07/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to
Luis Guerra c/o City of Las Cruces

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 14, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund (JSP) Process Center Monthly Samples OrderNo.: 1510314

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/7/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1510314**
Date Reported: **10/14/2015**

CLIENT: City of Las Cruces
Client Sample ID: AS1-151006
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 10/6/2015 10:08:00 AM
Lab ID: 1510314-001
Matrix: AIR
Received Date: 10/7/2015 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Toluene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Ethylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Naphthalene	ND	0.20		µg/L	1	10/12/2015 11:22:27 AM	R29471
1-Methylnaphthalene	ND	0.40		µg/L	1	10/12/2015 11:22:27 AM	R29471
2-Methylnaphthalene	ND	0.40		µg/L	1	10/12/2015 11:22:27 AM	R29471
Acetone	ND	1.0		µg/L	1	10/12/2015 11:22:27 AM	R29471
Bromobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Bromodichloromethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Bromoform	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Bromomethane	ND	0.20		µg/L	1	10/12/2015 11:22:27 AM	R29471
2-Butanone	ND	1.0		µg/L	1	10/12/2015 11:22:27 AM	R29471
Carbon disulfide	ND	1.0		µg/L	1	10/12/2015 11:22:27 AM	R29471
Carbon tetrachloride	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Chlorobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Chloroethane	ND	0.20		µg/L	1	10/12/2015 11:22:27 AM	R29471
Chloroform	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Chloromethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
2-Chlorotoluene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
4-Chlorotoluene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
cis-1,2-DCE	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	10/12/2015 11:22:27 AM	R29471
Dibromochloromethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Dibromomethane	ND	0.20		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2-Dichlorobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,3-Dichlorobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,4-Dichlorobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Dichlorodifluoromethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,1-Dichloroethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,1-Dichloroethene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2-Dichloropropane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,3-Dichloropropane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
2,2-Dichloropropane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-151006
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 10/6/2015 10:08:00 AM
Lab ID: 1510314-001
Matrix: AIR
Received Date: 10/7/2015 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Hexachlorobutadiene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
2-Hexanone	ND	1.0		µg/L	1	10/12/2015 11:22:27 AM	R29471
Isopropylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
4-Isopropyltoluene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
4-Methyl-2-pentanone	ND	1.0		µg/L	1	10/12/2015 11:22:27 AM	R29471
Methylene chloride	ND	0.30		µg/L	1	10/12/2015 11:22:27 AM	R29471
n-Butylbenzene	ND	0.30		µg/L	1	10/12/2015 11:22:27 AM	R29471
n-Propylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
sec-Butylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Styrene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
tert-Butylbenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
trans-1,2-DCE	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,1,1-Trichloroethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,1,2-Trichloroethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Trichloroethene (TCE)	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Trichlorofluoromethane	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
1,2,3-Trichloropropane	ND	0.20		µg/L	1	10/12/2015 11:22:27 AM	R29471
Vinyl chloride	ND	0.10		µg/L	1	10/12/2015 11:22:27 AM	R29471
Xylenes, Total	ND	0.15		µg/L	1	10/12/2015 11:22:27 AM	R29471
Surr: Dibromofluoromethane	99.1	70-130		%REC	1	10/12/2015 11:22:27 AM	R29471
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%REC	1	10/12/2015 11:22:27 AM	R29471
Surr: Toluene-d8	98.7	70-130		%REC	1	10/12/2015 11:22:27 AM	R29471
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	10/12/2015 11:22:27 AM	R29471

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-151006
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 10/6/2015 10:10:00 AM
Lab ID: 1510314-002
Matrix: AIR
Received Date: 10/7/2015 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Toluene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Ethylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Naphthalene	ND	0.20		µg/L	1	10/12/2015 12:17:50 PM	R29471
1-Methylnaphthalene	ND	0.40		µg/L	1	10/12/2015 12:17:50 PM	R29471
2-Methylnaphthalene	ND	0.40		µg/L	1	10/12/2015 12:17:50 PM	R29471
Acetone	ND	1.0		µg/L	1	10/12/2015 12:17:50 PM	R29471
Bromobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Bromodichloromethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Bromoform	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Bromomethane	ND	0.20		µg/L	1	10/12/2015 12:17:50 PM	R29471
2-Butanone	ND	1.0		µg/L	1	10/12/2015 12:17:50 PM	R29471
Carbon disulfide	ND	1.0		µg/L	1	10/12/2015 12:17:50 PM	R29471
Carbon tetrachloride	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Chlorobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Chloroethane	ND	0.20		µg/L	1	10/12/2015 12:17:50 PM	R29471
Chloroform	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Chloromethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
2-Chlorotoluene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
4-Chlorotoluene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
cis-1,2-DCE	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	10/12/2015 12:17:50 PM	R29471
Dibromochloromethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Dibromomethane	ND	0.20		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2-Dichlorobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,3-Dichlorobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,4-Dichlorobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Dichlorodifluoromethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,1-Dichloroethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,1-Dichloroethene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2-Dichloropropane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,3-Dichloropropane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
2,2-Dichloropropane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-151006
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 10/6/2015 10:10:00 AM
Lab ID: 1510314-002
Matrix: AIR
Received Date: 10/7/2015 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Hexachlorobutadiene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
2-Hexanone	ND	1.0		µg/L	1	10/12/2015 12:17:50 PM	R29471
Isopropylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
4-Isopropyltoluene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
4-Methyl-2-pentanone	ND	1.0		µg/L	1	10/12/2015 12:17:50 PM	R29471
Methylene chloride	ND	0.30		µg/L	1	10/12/2015 12:17:50 PM	R29471
n-Butylbenzene	ND	0.30		µg/L	1	10/12/2015 12:17:50 PM	R29471
n-Propylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
sec-Butylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Styrene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
tert-Butylbenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Tetrachloroethene (PCE)	0.10	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
trans-1,2-DCE	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,1,1-Trichloroethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,1,2-Trichloroethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Trichloroethene (TCE)	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Trichlorofluoromethane	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
1,2,3-Trichloropropane	ND	0.20		µg/L	1	10/12/2015 12:17:50 PM	R29471
Vinyl chloride	ND	0.10		µg/L	1	10/12/2015 12:17:50 PM	R29471
Xylenes, Total	ND	0.15		µg/L	1	10/12/2015 12:17:50 PM	R29471
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/12/2015 12:17:50 PM	R29471
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/12/2015 12:17:50 PM	R29471
Surr: Toluene-d8	94.4	70-130		%REC	1	10/12/2015 12:17:50 PM	R29471
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/12/2015 12:17:50 PM	R29471

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1510314 RcptNo: 1

Received by/date: AT 10/07/15

Logged By: Anne Thorne 10/7/2015 8:40:00 AM Anne Thorne

Completed By: Anne Thorne 10/7/2015 Anne Thorne

Reviewed By: CS 10/07/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☑
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
Las Cruces, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: Joint Superfund (JSP) Process Center-Monthly Samples
Project #: CLC-JSP "GRIGGS-WALNUT"
Project Manager: Luis Guerra
575-528-3609
lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☐ Yes ☐ No
Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1510314	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B ~~(VOA)~~ VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
9/06/15	1008	AIR	AS1_151006	1 Tedlar Bag	NONE	-001										X						
9/06/15	1010	AIR	AS2_151006	1 Tedlar Bag	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/06/15	1500	Laura Montoya	[signature]	10/07/15	0840
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to:
Luis Guerra c/o City of Las Cruces

If [illegible] samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 09, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs/Walnut Groundwater Monitoring Wells OrderNo.: 1511136

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/4/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1511136**
Date Reported: **11/9/2015**

CLIENT: City of Las Cruces
Client Sample ID: MW-1-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 8:25:00 AM
Lab ID: 1511136-001
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Toluene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Ethylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Naphthalene	ND	2.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
2-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Acetone	ND	10		µg/L	1	11/6/2015 12:20:53 AM	R30041
Bromobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Bromodichloromethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Bromoform	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Bromomethane	ND	3.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
2-Butanone	ND	10		µg/L	1	11/6/2015 12:20:53 AM	R30041
Carbon disulfide	ND	10		µg/L	1	11/6/2015 12:20:53 AM	R30041
Carbon Tetrachloride	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Chlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Chloroethane	ND	2.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Chloroform	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Chloromethane	ND	3.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
2-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
4-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
cis-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Dibromochloromethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Dibromomethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,1-Dichloroethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,1-Dichloroethene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,3-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
2,2-Dichloropropane	ND	2.0		µg/L	1	11/6/2015 12:20:53 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MW-1-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 8:25:00 AM
Lab ID: 1511136-001
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Hexachlorobutadiene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
2-Hexanone	ND	10		µg/L	1	11/6/2015 12:20:53 AM	R30041
Isopropylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
4-Isopropyltoluene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
4-Methyl-2-pentanone	ND	10		µg/L	1	11/6/2015 12:20:53 AM	R30041
Methylene Chloride	ND	3.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
n-Butylbenzene	ND	3.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
n-Propylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
sec-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Styrene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
tert-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Tetrachloroethene (PCE)	2.1	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
trans-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Trichlorofluoromethane	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Vinyl chloride	ND	1.0		µg/L	1	11/6/2015 12:20:53 AM	R30041
Xylenes, Total	ND	1.5		µg/L	1	11/6/2015 12:20:53 AM	R30041
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	1	11/6/2015 12:20:53 AM	R30041
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	11/6/2015 12:20:53 AM	R30041
Surr: Dibromofluoromethane	93.6	70-130		%REC	1	11/6/2015 12:20:53 AM	R30041
Surr: Toluene-d8	103	70-130		%REC	1	11/6/2015 12:20:53 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-5-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 8:45:00 AM
Lab ID: 1511136-002
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Toluene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Ethylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Naphthalene	ND	2.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
2-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Acetone	ND	10		µg/L	1	11/6/2015 12:49:35 AM	R30041
Bromobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Bromodichloromethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Bromoform	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Bromomethane	ND	3.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
2-Butanone	ND	10		µg/L	1	11/6/2015 12:49:35 AM	R30041
Carbon disulfide	ND	10		µg/L	1	11/6/2015 12:49:35 AM	R30041
Carbon Tetrachloride	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Chlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Chloroethane	ND	2.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Chloroform	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Chloromethane	ND	3.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
2-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
4-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
cis-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Dibromochloromethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Dibromomethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,1-Dichloroethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,1-Dichloroethene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,3-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
2,2-Dichloropropane	ND	2.0		µg/L	1	11/6/2015 12:49:35 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-5-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 8:45:00 AM
Lab ID: 1511136-002
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Hexachlorobutadiene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
2-Hexanone	ND	10		µg/L	1	11/6/2015 12:49:35 AM	R30041
Isopropylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
4-Isopropyltoluene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
4-Methyl-2-pentanone	ND	10		µg/L	1	11/6/2015 12:49:35 AM	R30041
Methylene Chloride	ND	3.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
n-Butylbenzene	ND	3.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
n-Propylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
sec-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Styrene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
tert-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Tetrachloroethene (PCE)	1.1	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
trans-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Trichlorofluoromethane	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Vinyl chloride	ND	1.0		µg/L	1	11/6/2015 12:49:35 AM	R30041
Xylenes, Total	ND	1.5		µg/L	1	11/6/2015 12:49:35 AM	R30041
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%REC	1	11/6/2015 12:49:35 AM	R30041
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	11/6/2015 12:49:35 AM	R30041
Surr: Dibromofluoromethane	88.7	70-130		%REC	1	11/6/2015 12:49:35 AM	R30041
Surr: Toluene-d8	91.0	70-130		%REC	1	11/6/2015 12:49:35 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-6-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 9:00:00 AM
Lab ID: 1511136-003
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Toluene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Ethylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Naphthalene	ND	2.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
2-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Acetone	ND	10		µg/L	1	11/6/2015 4:03:54 PM	R30086
Bromobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Bromodichloromethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Bromoform	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Bromomethane	ND	3.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
2-Butanone	ND	10		µg/L	1	11/6/2015 4:03:54 PM	R30086
Carbon disulfide	ND	10		µg/L	1	11/6/2015 4:03:54 PM	R30086
Carbon Tetrachloride	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Chlorobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Chloroethane	ND	2.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Chloroform	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Chloromethane	ND	3.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
2-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
4-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
cis-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Dibromochloromethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Dibromomethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,1-Dichloroethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,1-Dichloroethene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,3-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
2,2-Dichloropropane	ND	2.0		µg/L	1	11/6/2015 4:03:54 PM	R30086

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-6-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 9:00:00 AM
Lab ID: 1511136-003
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Hexachlorobutadiene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
2-Hexanone	ND	10		µg/L	1	11/6/2015 4:03:54 PM	R30086
Isopropylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
4-Isopropyltoluene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
4-Methyl-2-pentanone	ND	10		µg/L	1	11/6/2015 4:03:54 PM	R30086
Methylene Chloride	ND	3.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
n-Butylbenzene	ND	3.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
n-Propylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
sec-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Styrene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
tert-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
trans-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Trichlorofluoromethane	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Vinyl chloride	ND	1.0		µg/L	1	11/6/2015 4:03:54 PM	R30086
Xylenes, Total	ND	1.5		µg/L	1	11/6/2015 4:03:54 PM	R30086
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%REC	1	11/6/2015 4:03:54 PM	R30086
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	1	11/6/2015 4:03:54 PM	R30086
Surr: Dibromofluoromethane	103	70-130		%REC	1	11/6/2015 4:03:54 PM	R30086
Surr: Toluene-d8	101	70-130		%REC	1	11/6/2015 4:03:54 PM	R30086

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-10-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 9:14:00 AM
Lab ID: 1511136-004
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Toluene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Ethylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Naphthalene	ND	2.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
2-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Acetone	ND	10		µg/L	1	11/6/2015 1:18:17 AM	R30041
Bromobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Bromodichloromethane	1.2	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Bromoform	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Bromomethane	ND	3.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
2-Butanone	ND	10		µg/L	1	11/6/2015 1:18:17 AM	R30041
Carbon disulfide	ND	10		µg/L	1	11/6/2015 1:18:17 AM	R30041
Carbon Tetrachloride	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Chlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Chloroethane	ND	2.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Chloroform	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Chloromethane	ND	3.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
2-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
4-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
cis-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Dibromochloromethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Dibromomethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,1-Dichloroethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,1-Dichloroethene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,3-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
2,2-Dichloropropane	ND	2.0		µg/L	1	11/6/2015 1:18:17 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-10-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 9:14:00 AM
Lab ID: 1511136-004
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Hexachlorobutadiene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
2-Hexanone	ND	10		µg/L	1	11/6/2015 1:18:17 AM	R30041
Isopropylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
4-Isopropyltoluene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
4-Methyl-2-pentanone	ND	10		µg/L	1	11/6/2015 1:18:17 AM	R30041
Methylene Chloride	ND	3.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
n-Butylbenzene	ND	3.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
n-Propylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
sec-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Styrene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
tert-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Tetrachloroethene (PCE)	23	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
trans-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Trichloroethene (TCE)	1.8	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Trichlorofluoromethane	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Vinyl chloride	ND	1.0		µg/L	1	11/6/2015 1:18:17 AM	R30041
Xylenes, Total	ND	1.5		µg/L	1	11/6/2015 1:18:17 AM	R30041
Surr: 1,2-Dichloroethane-d4	86.7	70-130		%REC	1	11/6/2015 1:18:17 AM	R30041
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	11/6/2015 1:18:17 AM	R30041
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	11/6/2015 1:18:17 AM	R30041
Surr: Toluene-d8	93.6	70-130		%REC	1	11/6/2015 1:18:17 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-9-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 9:28:00 AM
Lab ID: 1511136-005
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Toluene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Ethylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Naphthalene	ND	2.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
2-Methylnaphthalene	ND	4.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Acetone	ND	10		µg/L	1	11/6/2015 1:46:58 AM	R30041
Bromobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Bromodichloromethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Bromoform	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Bromomethane	ND	3.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
2-Butanone	ND	10		µg/L	1	11/6/2015 1:46:58 AM	R30041
Carbon disulfide	ND	10		µg/L	1	11/6/2015 1:46:58 AM	R30041
Carbon Tetrachloride	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Chlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Chloroethane	ND	2.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Chloroform	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Chloromethane	ND	3.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
2-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
4-Chlorotoluene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
cis-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Dibromochloromethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Dibromomethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,1-Dichloroethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,1-Dichloroethene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,3-Dichloropropane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
2,2-Dichloropropane	ND	2.0		µg/L	1	11/6/2015 1:46:58 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: MWSF-9-151103
Project: Griggs/Walnut Groundwater Monitoring
Collection Date: 11/3/2015 9:28:00 AM
Lab ID: 1511136-005
Matrix: AQUEOUS
Received Date: 11/4/2015 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Hexachlorobutadiene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
2-Hexanone	ND	10		µg/L	1	11/6/2015 1:46:58 AM	R30041
Isopropylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
4-Isopropyltoluene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
4-Methyl-2-pentanone	ND	10		µg/L	1	11/6/2015 1:46:58 AM	R30041
Methylene Chloride	ND	3.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
n-Butylbenzene	ND	3.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
n-Propylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
sec-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Styrene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
tert-Butylbenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
trans-1,2-DCE	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Trichlorofluoromethane	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Vinyl chloride	ND	1.0		µg/L	1	11/6/2015 1:46:58 AM	R30041
Xylenes, Total	ND	1.5		µg/L	1	11/6/2015 1:46:58 AM	R30041
Surr: 1,2-Dichloroethane-d4	87.5	70-130		%REC	1	11/6/2015 1:46:58 AM	R30041
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	11/6/2015 1:46:58 AM	R30041
Surr: Dibromofluoromethane	88.4	70-130		%REC	1	11/6/2015 1:46:58 AM	R30041
Surr: Toluene-d8	94.1	70-130		%REC	1	11/6/2015 1:46:58 AM	R30041

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511136**
09-Nov-15

Client: City of Las Cruces
Project: Griggs/Walnut Groundwater Monitoring Wells

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30041** RunNo: **30041**
Prep Date: Analysis Date: **11/5/2015** SeqNo: **915390** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	19	1.0	20.00	0	95.4	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	102	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.3	70	130			
Surr: Toluene-d8	8.9		10.00		89.0	70	130			

Sample ID **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30041** RunNo: **30041**
Prep Date: Analysis Date: **11/5/2015** SeqNo: **915391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511136**
09-Nov-15

Client: City of Las Cruces
Project: Griggs/Walnut Groundwater Monitoring Wells

Sample ID **rb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30041**	RunNo: **30041**			
Prep Date:	Analysis Date: **11/5/2015**	SeqNo: **915391**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511136**
09-Nov-15

Client: City of Las Cruces
Project: Griggs/Walnut Groundwater Monitoring Wells

Sample ID **rb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30041** RunNo: **30041**
Prep Date: Analysis Date: **11/5/2015** SeqNo: **915391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.0		10.00		80.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.6		10.00		85.8	70	130			
Surr: Toluene-d8	9.5		10.00		95.3	70	130			

Sample ID **100ng lcs3** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30086** RunNo: **30086**
Prep Date: Analysis Date: **11/6/2015** SeqNo: **916525** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30086** RunNo: **30086**
Prep Date: Analysis Date: **11/6/2015** SeqNo: **916527** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511136**
09-Nov-15

Client: City of Las Cruces
Project: Griggs/Walnut Groundwater Monitoring Wells

Sample ID **rb3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30086**	RunNo: **30086**			
Prep Date:	Analysis Date: **11/6/2015**	SeqNo: **916527**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511136**
09-Nov-15

Client: City of Las Cruces
Project: Griggs/Walnut Groundwater Monitoring Wells

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30086** RunNo: **30086**
Prep Date: Analysis Date: **11/6/2015** SeqNo: **916527** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1511136 RcptNo: 1

Received by/date: JA 11/04/15

Logged By: Anne Thorne 11/4/2015 8:55:00 AM Anne Thorne

Completed By: Anne Thorne 11/4/2015 Anne Thorne

Reviewed By: JO 11/04/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? UPS

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3609

Email or Fax#: 575-528-3630

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☐ Standard ☐ **Rush** _____

Project Name: GRIGGS / WALNUT Ground WATER MONITORING WELLS

Project #:

Project Manager: Luis Guerra lguerra@las-cruces.org

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511136	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/15	0825	Ground H2O	MW-1_151103	3-40ml vial	HgCl2	001										X						
3/15	0845	Ground H2O	MWSF-5_151103	3-40ml	HgCl2	002										X						
3/15	0900	Ground H2O	MWSF-6_151103	3-40ml	HgCl2	003										X						
3/15	0914	Ground H2O	MWSF-10_151103	3-40 ml	HgCl2	004										X						
3/15	0928	Ground H2O	MWSF-9_151103	3-40 ml	HgCl2	005										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/15	1500	Laura Montoya	[signature]	11/04/15	0855
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send reports to Luis Guerra at email address above. Send invoice to Luis Guerra@ CLC

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 09, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs/Walnut GW Monitoring Wells OrderNo.: 1511470

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/11/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1511470**
Date Reported: **12/9/2015**

CLIENT: City of Las Cruces
Client Sample ID: CLC-PAZ PARK
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/9/2015 10:02:00 AM
Lab ID: 1511470-001
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Toluene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Ethylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Naphthalene	ND	2.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Acetone	ND	10		µg/L	1	11/14/2015 7:36:23 AM	b30245
Bromobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Bromoform	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Bromomethane	ND	3.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
2-Butanone	ND	10		µg/L	1	11/14/2015 7:36:23 AM	b30245
Carbon disulfide	ND	10		µg/L	1	11/14/2015 7:36:23 AM	b30245
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Chlorobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Chloroethane	ND	2.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Chloroform	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Chloromethane	ND	3.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Dibromomethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2015 7:36:23 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC-PAZ PARK
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/9/2015 10:02:00 AM
Lab ID: 1511470-001
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
2-Hexanone	ND	10		µg/L	1	11/14/2015 7:36:23 AM	b30245
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2015 7:36:23 AM	b30245
Methylene Chloride	ND	3.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Styrene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Vinyl chloride	ND	1.0		µg/L	1	11/14/2015 7:36:23 AM	b30245
Xylenes, Total	ND	1.5		µg/L	1	11/14/2015 7:36:23 AM	b30245
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	11/14/2015 7:36:23 AM	b30245
Surr: 4-Bromofluorobenzene	87.9	70-130		%REC	1	11/14/2015 7:36:23 AM	b30245
Surr: Dibromofluoromethane	98.8	70-130		%REC	1	11/14/2015 7:36:23 AM	b30245
Surr: Toluene-d8	102	70-130		%REC	1	11/14/2015 7:36:23 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:12:00 AM
Lab ID: 1511470-002
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS						Analyst:	**DBD**
Antimony	ND	0.0010		mg/L	1	11/25/2015 3:36:31 PM	A30497
Arsenic	ND	0.010		mg/L	1	11/25/2015 3:36:31 PM	A30497
Copper	0.0018	0.0010		mg/L	1	11/25/2015 3:36:31 PM	A30497
Lead	ND	0.00050		mg/L	1	11/25/2015 3:36:31 PM	A30497
Selenium	0.0038	0.0010		mg/L	1	11/25/2015 3:36:31 PM	A30497
Thallium	ND	0.00050		mg/L	1	11/25/2015 3:36:31 PM	A30497
Uranium	0.024	0.00050		mg/L	1	11/25/2015 3:36:31 PM	A30497
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	0.53	0.10		mg/L	1	11/12/2015 12:29:50 AM	A30163
Chloride	140	10		mg/L	20	11/12/2015 12:42:15 AM	A30163
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	11/12/2015 12:29:50 AM	A30163
Bromide	0.32	0.10		mg/L	1	11/12/2015 12:29:50 AM	A30163
Nitrogen, Nitrate (As N)	2.3	0.10		mg/L	1	11/12/2015 12:29:50 AM	A30163
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/12/2015 12:29:50 AM	A30163
Sulfate	190	10		mg/L	20	11/12/2015 12:42:15 AM	A30163
EPA METHOD 200.7: METALS						Analyst:	**MED**
Aluminum	ND	0.020		mg/L	1	11/13/2015 2:17:56 PM	A30225
Barium	0.057	0.0020		mg/L	1	11/13/2015 2:17:56 PM	A30225
Beryllium	ND	0.0020		mg/L	1	11/13/2015 2:17:56 PM	A30225
Cadmium	ND	0.0020		mg/L	1	11/13/2015 2:17:56 PM	A30225
Calcium	98	1.0		mg/L	1	11/13/2015 2:17:56 PM	A30225
Chromium	ND	0.0060		mg/L	1	11/13/2015 2:17:56 PM	A30225
Iron	ND	0.020		mg/L	1	11/13/2015 2:17:56 PM	A30225
Magnesium	31	1.0		mg/L	1	11/13/2015 2:17:56 PM	A30225
Manganese	0.044	0.0020		mg/L	1	11/13/2015 2:17:56 PM	A30225
Nickel	ND	0.010		mg/L	1	11/13/2015 2:17:56 PM	A30225
Potassium	8.5	1.0		mg/L	1	11/13/2015 2:17:56 PM	A30225
Vanadium	ND	0.050		mg/L	1	11/13/2015 2:17:56 PM	A30225
Zinc	ND	0.010		mg/L	1	11/13/2015 2:17:56 PM	A30225
EPA METHOD 245.1: MERCURY						Analyst:	**DBD**
Mercury	ND	0.00020		mg/L	1	11/24/2015 5:15:29 PM	22501
EPA METHOD 8260B: VOLATILES						Analyst:	**BCN**
Benzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Toluene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Ethylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:12:00 AM
Lab ID: 1511470-002
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Naphthalene	ND	2.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Acetone	ND	10		µg/L	1	11/14/2015 8:06:32 AM	b30245
Bromobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Bromoform	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Bromomethane	ND	3.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
2-Butanone	ND	10		µg/L	1	11/14/2015 8:06:32 AM	b30245
Carbon disulfide	ND	10		µg/L	1	11/14/2015 8:06:32 AM	b30245
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Chlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Chloroethane	ND	2.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Chloroform	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Chloromethane	ND	3.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Dibromomethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
2-Hexanone	ND	10		µg/L	1	11/14/2015 8:06:32 AM	b30245
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:12:00 AM
Lab ID: 1511470-002
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2015 8:06:32 AM	b30245
Methylene Chloride	ND	3.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Styrene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Tetrachloroethene (PCE)	14	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Vinyl chloride	ND	1.0		µg/L	1	11/14/2015 8:06:32 AM	b30245
Xylenes, Total	ND	1.5		µg/L	1	11/14/2015 8:06:32 AM	b30245
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	11/14/2015 8:06:32 AM	b30245
Surr: 4-Bromofluorobenzene	89.5	70-130		%REC	1	11/14/2015 8:06:32 AM	b30245
Surr: Dibromofluoromethane	98.5	70-130		%REC	1	11/14/2015 8:06:32 AM	b30245
Surr: Toluene-d8	102	70-130		%REC	1	11/14/2015 8:06:32 AM	b30245

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:35:00 AM
Lab ID: 1511470-003
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS						Analyst:	**DBD**
Antimony	ND	0.0010		mg/L	1	11/25/2015 3:52:00 PM	A30497
Arsenic	ND	0.010		mg/L	1	11/25/2015 3:52:00 PM	A30497
Copper	0.0020	0.0010		mg/L	1	11/25/2015 3:52:00 PM	A30497
Lead	ND	0.00050		mg/L	1	11/25/2015 3:52:00 PM	A30497
Selenium	0.0051	0.0010		mg/L	1	11/25/2015 3:52:00 PM	A30497
Thallium	ND	0.00050		mg/L	1	11/25/2015 3:52:00 PM	A30497
Uranium	0.023	0.00050		mg/L	1	11/25/2015 3:52:00 PM	A30497
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	0.43	0.10		mg/L	1	11/12/2015 1:44:18 AM	A30163
Chloride	160	10		mg/L	20	11/12/2015 1:56:42 AM	A30163
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	11/12/2015 1:44:18 AM	A30163
Bromide	0.39	0.10		mg/L	1	11/12/2015 1:44:18 AM	A30163
Nitrogen, Nitrate (As N)	4.6	0.10		mg/L	1	11/12/2015 1:44:18 AM	A30163
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/12/2015 1:44:18 AM	A30163
Sulfate	240	10		mg/L	20	11/12/2015 1:56:42 AM	A30163
EPA METHOD 200.7: METALS						Analyst:	**MED**
Aluminum	ND	0.020		mg/L	1	11/13/2015 2:27:59 PM	A30225
Barium	0.071	0.0020		mg/L	1	11/13/2015 2:27:59 PM	A30225
Beryllium	ND	0.0020		mg/L	1	11/13/2015 2:27:59 PM	A30225
Cadmium	ND	0.0020		mg/L	1	11/13/2015 2:27:59 PM	A30225
Calcium	130	5.0		mg/L	5	11/13/2015 2:30:03 PM	A30225
Chromium	ND	0.0060		mg/L	1	11/13/2015 2:27:59 PM	A30225
Iron	ND	0.020		mg/L	1	11/13/2015 2:27:59 PM	A30225
Magnesium	32	1.0		mg/L	1	11/13/2015 2:27:59 PM	A30225
Manganese	0.0026	0.0020		mg/L	1	11/13/2015 2:27:59 PM	A30225
Nickel	ND	0.010		mg/L	1	11/13/2015 2:27:59 PM	A30225
Potassium	9.0	1.0		mg/L	1	11/13/2015 2:27:59 PM	A30225
Vanadium	ND	0.050		mg/L	1	11/13/2015 2:27:59 PM	A30225
Zinc	ND	0.010		mg/L	1	11/13/2015 2:27:59 PM	A30225
EPA METHOD 245.1: MERCURY						Analyst:	**DBD**
Mercury	ND	0.00020		mg/L	1	11/24/2015 5:17:36 PM	22501
EPA METHOD 8260B: VOLATILES						Analyst:	**BCN**
Benzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Toluene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Ethylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:35:00 AM
Lab ID: 1511470-003
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Naphthalene	ND	2.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Acetone	ND	10		µg/L	1	11/14/2015 8:36:46 AM	b30245
Bromobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Bromoform	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Bromomethane	ND	3.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
2-Butanone	ND	10		µg/L	1	11/14/2015 8:36:46 AM	b30245
Carbon disulfide	ND	10		µg/L	1	11/14/2015 8:36:46 AM	b30245
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Chlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Chloroethane	ND	2.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Chloroform	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Chloromethane	ND	3.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Dibromomethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
2-Hexanone	ND	10		µg/L	1	11/14/2015 8:36:46 AM	b30245
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:35:00 AM
Lab ID: 1511470-003
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2015 8:36:46 AM	b30245
Methylene Chloride	ND	3.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Styrene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Tetrachloroethene (PCE)	13	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Vinyl chloride	ND	1.0		µg/L	1	11/14/2015 8:36:46 AM	b30245
Xylenes, Total	ND	1.5		µg/L	1	11/14/2015 8:36:46 AM	b30245
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	11/14/2015 8:36:46 AM	b30245
Surr: 4-Bromofluorobenzene	83.2	70-130		%REC	1	11/14/2015 8:36:46 AM	b30245
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	11/14/2015 8:36:46 AM	b30245
Surr: Toluene-d8	98.6	70-130		%REC	1	11/14/2015 8:36:46 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC26_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 10:22:00 AM
Lab ID: 1511470-004
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Toluene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Ethylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Naphthalene	ND	2.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Acetone	ND	10		µg/L	1	11/14/2015 9:06:55 AM	b30245
Bromobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Bromoform	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Bromomethane	ND	3.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
2-Butanone	ND	10		µg/L	1	11/14/2015 9:06:55 AM	b30245
Carbon disulfide	ND	10		µg/L	1	11/14/2015 9:06:55 AM	b30245
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Chlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Chloroethane	ND	2.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Chloroform	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Chloromethane	ND	3.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Dibromomethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2015 9:06:55 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC26_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 10:22:00 AM
Lab ID: 1511470-004
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
2-Hexanone	ND	10		µg/L	1	11/14/2015 9:06:55 AM	b30245
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2015 9:06:55 AM	b30245
Methylene Chloride	ND	3.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Styrene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Vinyl chloride	ND	1.0		µg/L	1	11/14/2015 9:06:55 AM	b30245
Xylenes, Total	ND	1.5		µg/L	1	11/14/2015 9:06:55 AM	b30245
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	11/14/2015 9:06:55 AM	b30245
Surr: 4-Bromofluorobenzene	85.9	70-130		%REC	1	11/14/2015 9:06:55 AM	b30245
Surr: Dibromofluoromethane	98.3	70-130		%REC	1	11/14/2015 9:06:55 AM	b30245
Surr: Toluene-d8	99.6	70-130		%REC	1	11/14/2015 9:06:55 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC20_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 10:40:00 AM
Lab ID: 1511470-005
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Toluene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Ethylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Naphthalene	ND	2.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Acetone	ND	10		µg/L	1	11/14/2015 9:37:13 AM	b30245
Bromobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Bromoform	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Bromomethane	ND	3.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
2-Butanone	ND	10		µg/L	1	11/14/2015 9:37:13 AM	b30245
Carbon disulfide	ND	10		µg/L	1	11/14/2015 9:37:13 AM	b30245
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Chlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Chloroethane	ND	2.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Chloroform	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Chloromethane	ND	3.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Dibromomethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2015 9:37:13 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC20_151110
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 10:40:00 AM
Lab ID: 1511470-005
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
2-Hexanone	ND	10		µg/L	1	11/14/2015 9:37:13 AM	b30245
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2015 9:37:13 AM	b30245
Methylene Chloride	ND	3.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Styrene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Vinyl chloride	ND	1.0		µg/L	1	11/14/2015 9:37:13 AM	b30245
Xylenes, Total	ND	1.5		µg/L	1	11/14/2015 9:37:13 AM	b30245
Surr: 1,2-Dichloroethane-d4	109	70-130		%REC	1	11/14/2015 9:37:13 AM	b30245
Surr: 4-Bromofluorobenzene	85.3	70-130		%REC	1	11/14/2015 9:37:13 AM	b30245
Surr: Dibromofluoromethane	98.5	70-130		%REC	1	11/14/2015 9:37:13 AM	b30245
Surr: Toluene-d8	98.7	70-130		%REC	1	11/14/2015 9:37:13 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Griggs/Walnut GW Monitoring Wells
Collection Date:
Lab ID: 1511470-006
Matrix: TRIP BLANK
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Toluene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Ethylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Naphthalene	ND	2.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Acetone	ND	10		µg/L	1	11/14/2015 10:07:26 AM	b30245
Bromobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Bromoform	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Bromomethane	ND	3.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
2-Butanone	ND	10		µg/L	1	11/14/2015 10:07:26 AM	b30245
Carbon disulfide	ND	10		µg/L	1	11/14/2015 10:07:26 AM	b30245
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Chlorobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Chloroethane	ND	2.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Chloroform	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Chloromethane	ND	3.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Dibromomethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2015 10:07:26 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: Trip Blank
Project: Griggs/Walnut GW Monitoring Wells
Collection Date:
Lab ID: 1511470-006
Matrix: TRIP BLANK
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
2-Hexanone	ND	10		µg/L	1	11/14/2015 10:07:26 AM	b30245
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2015 10:07:26 AM	b30245
Methylene Chloride	ND	3.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Styrene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Vinyl chloride	ND	1.0		µg/L	1	11/14/2015 10:07:26 AM	b30245
Xylenes, Total	ND	1.5		µg/L	1	11/14/2015 10:07:26 AM	b30245
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	11/14/2015 10:07:26 AM	b30245
Surr: 4-Bromofluorobenzene	85.2	70-130		%REC	1	11/14/2015 10:07:26 AM	b30245
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	11/14/2015 10:07:26 AM	b30245
Surr: Toluene-d8	91.9	70-130		%REC	1	11/14/2015 10:07:26 AM	b30245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151110 DUPE
Project: Griggs/Walnut GW Monitoring Wells
Collection Date: 11/10/2015 9:12:00 AM
Lab ID: 1511470-007
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS						Analyst:	**DBD**
Antimony	ND	0.0010		mg/L	1	11/25/2015 4:02:18 PM	A30497
Arsenic	ND	0.010		mg/L	1	11/25/2015 4:02:18 PM	A30497
Copper	0.0018	0.0010		mg/L	1	11/25/2015 4:02:18 PM	A30497
Lead	0.00054	0.00050		mg/L	1	11/25/2015 4:02:18 PM	A30497
Selenium	0.0038	0.0010		mg/L	1	11/25/2015 4:02:18 PM	A30497
Thallium	ND	0.00050		mg/L	1	11/25/2015 4:02:18 PM	A30497
Uranium	0.024	0.00050		mg/L	1	11/25/2015 4:02:18 PM	A30497
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	0.54	0.10		mg/L	1	11/12/2015 2:09:07 AM	A30163
Chloride	140	10		mg/L	20	11/12/2015 2:21:31 AM	A30163
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	11/12/2015 2:09:07 AM	A30163
Bromide	0.31	0.10		mg/L	1	11/12/2015 2:09:07 AM	A30163
Nitrogen, Nitrate (As N)	2.4	0.10		mg/L	1	11/12/2015 2:09:07 AM	A30163
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/12/2015 2:09:07 AM	A30163
Sulfate	190	10		mg/L	20	11/12/2015 2:21:31 AM	A30163
EPA METHOD 200.7: METALS						Analyst:	**MED**
Aluminum	ND	0.020		mg/L	1	11/13/2015 2:31:58 PM	A30225
Barium	0.057	0.0020		mg/L	1	11/13/2015 2:31:58 PM	A30225
Beryllium	ND	0.0020		mg/L	1	11/13/2015 2:31:58 PM	A30225
Cadmium	ND	0.0020		mg/L	1	11/13/2015 2:31:58 PM	A30225
Calcium	99	1.0		mg/L	1	11/13/2015 2:31:58 PM	A30225
Chromium	ND	0.0060		mg/L	1	11/13/2015 2:31:58 PM	A30225
Iron	ND	0.020		mg/L	1	11/13/2015 2:31:58 PM	A30225
Magnesium	31	1.0		mg/L	1	11/13/2015 2:31:58 PM	A30225
Manganese	0.044	0.0020		mg/L	1	11/13/2015 2:31:58 PM	A30225
Nickel	ND	0.010		mg/L	1	11/13/2015 2:31:58 PM	A30225
Potassium	8.5	1.0		mg/L	1	11/13/2015 2:31:58 PM	A30225
Vanadium	ND	0.050		mg/L	1	11/13/2015 2:31:58 PM	A30225
Zinc	ND	0.010		mg/L	1	11/13/2015 2:31:58 PM	A30225
EPA METHOD 245.1: MERCURY						Analyst:	**DBD**
Mercury	ND	0.00020		mg/L	1	11/24/2015 5:19:43 PM	22501

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: H15110250-001
Client Sample ID: 1511470-002D CLC27_151110

Report Date: 11/20/15
Collection Date: 11/10/15 09:12
DateReceived: 11/13/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - SPECIATED, TOTAL							
Arsenic-III	ND	ug/L		5		E1632AM	11/16/15 14:38 / rgk
Arsenic-V	ND	ug/L		5		E1632AM	11/16/15 14:38 / rgk

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: H15110250-002
Client Sample ID: 1511470-003D CLC18_151110

Report Date: 11/20/15
Collection Date: 11/10/15 09:35
DateReceived: 11/13/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - SPECIATED, TOTAL							
Arsenic-III	ND	ug/L		5		E1632AM	11/16/15 14:50 / rgk
Arsenic-V	ND	ug/L		5		E1632AM	11/16/15 14:50 / rgk

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: H15110250-003
Client Sample ID: 1511470-007D CLC27_151110 DUPE

Report Date: 11/20/15
Collection Date: 11/10/15 09:12
DateReceived: 11/13/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - SPECIATED, TOTAL							
Arsenic-III	ND	ug/L		5		E1632AM	11/16/15 15:02 / rgk
Arsenic-V	ND	ug/L		5		E1632AM	11/16/15 15:02 / rgk

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: Hall Environmental
Report Date: 11/20/15
Project: Not Indicated
Work Order: H15110250

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E1632AM**							Analytical Run: ARSENIC SPECIATION_151116A			
Lab ID:	**AS-ICV 25ppb-11/16/2**	2	Initial Calibration Verification Standard								11/16/15 12:37
Arsenic-III			25.8	ug/L	5.0	103	87.6	114			
Arsenic-V			24.2	ug/L	5.0	97	87	116			
Lab ID:	**AS-50.0-11/16/2015**	2	Continuing Calibration Verification Standard								11/16/15 12:49
Arsenic-III			47.4	ug/L	5.0	95	85	115			
Arsenic-V			49.4	ug/L	5.0	99	85	115			
Method:	**E1632AM**										Batch: R111038
Lab ID:	**AS-LFB 50ppb-11/16/**	2	Laboratory Fortified Blank				Run: ARSENIC SPECIATION_1511				11/16/15 13:13
Arsenic-III			51.8	ug/L	5.0	104	55	146			
Arsenic-V			45.6	ug/L	5.0	91	55	146			
Lab ID:	**ICB**	2	Method Blank				Run: ARSENIC SPECIATION_1511				11/16/15 13:25
Arsenic-III			ND	ug/L	0.6						
Arsenic-V			ND	ug/L	1						
Lab ID:	**H15110205-001A MS**	2	Sample Matrix Spike				Run: ARSENIC SPECIATION_1511				11/16/15 13:50
Arsenic-III			50.8	ug/L	5.0	102	55	146			
Arsenic-V			48.0	ug/L	5.0	96	55	146			
Lab ID:	**H15110205-001A MSD**	2	Sample Matrix Spike Duplicate				Run: ARSENIC SPECIATION_1511				11/16/15 14:02
Arsenic-III			49.8	ug/L	5.0	100	55	146	2.0	20	
Arsenic-V			49.6	ug/L	5.0	99	55	146	3.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **A30225** RunNo: **30225**
Prep Date: Analysis Date: **11/13/2015** SeqNo: **921060** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020								
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Potassium	ND	1.0								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **A30225** RunNo: **30225**
Prep Date: Analysis Date: **11/13/2015** SeqNo: **921061** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020	0.01000	0	102	50	150			
Barium	ND	0.0020	0.002000	0	86.0	50	150			
Beryllium	0.0021	0.0020	0.002000	0	103	50	150			
Cadmium	ND	0.0020	0.002000	0	71.5	50	150			
Calcium	ND	1.0	0.5000	0	102	50	150			
Chromium	0.0062	0.0060	0.006000	0	104	50	150			
Iron	0.021	0.020	0.02000	0	104	50	150			
Magnesium	ND	1.0	0.5000	0	105	50	150			
Manganese	0.0020	0.0020	0.002000	0	101	50	150			
Nickel	ND	0.010	0.005000	0	113	50	150			
Potassium	ND	1.0	0.5000	0	101	50	150			
Vanadium	ND	0.050	0.01000	0	98.0	50	150			
Zinc	ND	0.010	0.005000	0	101	50	150			

Sample ID **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **A30225** RunNo: **30225**
Prep Date: Analysis Date: **11/13/2015** SeqNo: **921062** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.53	0.020	0.5000	0	106	85	115			
Barium	0.50	0.0020	0.5000	0	101	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **A30225** RunNo: **30225**
Prep Date: Analysis Date: **11/13/2015** SeqNo: **921062** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Calcium	49	1.0	50.00	0	97.8	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Iron	0.48	0.020	0.5000	0	95.2	85	115			
Magnesium	49	1.0	50.00	0	98.8	85	115			
Manganese	0.49	0.0020	0.5000	0	97.9	85	115			
Nickel	0.48	0.010	0.5000	0	96.3	85	115			
Potassium	48	1.0	50.00	0	95.2	85	115			
Vanadium	0.53	0.050	0.5000	0	107	85	115			
Zinc	0.50	0.010	0.5000	0	99.5	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **A30497** RunNo: **30497**
Prep Date: Analysis Date: **11/25/2015** SeqNo: **931045** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.8	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.5	85	115			
Copper	0.025	0.0010	0.02500	0	99.2	85	115			
Lead	0.012	0.00050	0.01250	0	99.1	85	115			
Selenium	0.024	0.0010	0.02500	0	95.3	85	115			
Thallium	0.012	0.00050	0.01250	0	98.8	85	115			
Uranium	0.012	0.00050	0.01250	0	99.1	85	115			

Sample ID **LLLCS** SampType: **LCSLL** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **A30497** RunNo: **30497**
Prep Date: Analysis Date: **11/25/2015** SeqNo: **931049** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010	0.001000	0	99.4	50	150			
Arsenic	ND	0.0010	0.001000	0	93.9	50	150			
Copper	0.0013	0.0010	0.001000	0	126	50	150			
Lead	0.00052	0.00050	0.0005000	0	103	50	150			
Selenium	ND	0.0010	0.001000	0	95.6	50	150			
Thallium	ND	0.00050	0.0005000	0	98.7	50	150			
Uranium	ND	0.00050	0.0005000	0	100	50	150			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **A30497** RunNo: **30497**
Prep Date: Analysis Date: **11/25/2015** SeqNo: **931052** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Thallium	ND	0.00050								
Uranium	ND	0.00050								

Sample ID **1511470-003CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **CLC18_151110** Batch ID: **A30497** RunNo: **30497**
Prep Date: Analysis Date: **11/25/2015** SeqNo: **931070** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	99.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **1511470-003CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **CLC18_151110** Batch ID: **A30497** RunNo: **30497**
Prep Date: Analysis Date: **11/25/2015** SeqNo: **931070** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.010	0.02500	0.002041	100	70	130			
Copper	0.024	0.0010	0.02500	0.001983	89.1	70	130			
Lead	0.013	0.00050	0.01250	0.0002375	103	70	130			
Selenium	0.029	0.0010	0.02500	0.005077	93.9	70	130			
Thallium	0.013	0.00050	0.01250	000008032	103	70	130			
Uranium	0.036	0.00050	0.01250	0.02293	104	70	130			E

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID	**MB-22501**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**22501**	RunNo:	**30468**
Prep Date:	**11/24/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**929969** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-22501**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**22501**	RunNo:	**30468**
Prep Date:	**11/24/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**929970** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A30163** RunNo: **30163**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **919536** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A30163** RunNo: **30163**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **919537** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.55	0.10	0.5000	0	110	90	110			
Chloride	4.9	0.50	5.000	0	97.4	90	110			
Nitrogen, Nitrite (As N)	0.99	0.10	1.000	0	99.1	90	110			
Bromide	2.6	0.10	2.500	0	105	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	103	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	100	90	110			
Sulfate	10	0.50	10.00	0	99.9	90	110			

Sample ID **1511470-002BMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **CLC27_151110** Batch ID: **A30163** RunNo: **30163**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **919542** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.5332	106	75.3	111			
Nitrogen, Nitrite (As N)	0.94	0.10	1.000	0	94.1	77.1	110			
Bromide	2.9	0.10	2.500	0.3170	103	84.6	106			
Nitrogen, Nitrate (As N)	5.0	0.10	2.500	2.347	108	87.3	111			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.6	76.5	106			

Sample ID **1511470-002BMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **CLC27_151110** Batch ID: **A30163** RunNo: **30163**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **919543** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.5332	106	75.3	111	0.0192	20	
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	94.6	77.1	110	0.512	20	
Bromide	2.9	0.10	2.500	0.3170	104	84.6	106	0.691	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **1511470-002BMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **CLC27_151110** Batch ID: **A30163** RunNo: **30163**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **919543** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	5.1	0.10	2.500	2.347	108	87.3	111	0.301	20	
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.2	76.5	106	0.586	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **b30245** RunNo: **30245**
Prep Date: Analysis Date: **11/14/2015** SeqNo: **922090** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.9	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	19	1.0	20.00	0	93.4	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.6	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	91.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		86.5	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **b30245** RunNo: **30245**
Prep Date: Analysis Date: **11/14/2015** SeqNo: **922091** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **rb3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **b30245**	RunNo: **30245**	
Prep Date:	Analysis Date: **11/14/2015**	SeqNo: **922091**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511470**
09-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW Monitoring Wells

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **b30245** RunNo: **30245**
Prep Date: Analysis Date: **11/14/2015** SeqNo: **922091** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	8.4		10.00		84.1	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		99.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1511470 RcptNo: 1

Received by/date: LM 11/11/15

Logged By: Celina Sessa 11/11/2015 8:50:00 AM Celina Sessa

Completed By: Celina Sessa 11/11/2015 9:45:35 AM Celina Sessa

Reviewed By: TO 11/11/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6 (<2 or >12 unless noted)
Adjusted? No
Checked by: Ja

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Yes			

Chain-of-Custody Record

lient: City of Las Cruces

ailing Address: P.O. Box 20000
Las Cruces, NM 88004

hone #: 575-528-3604

mail or Fax#: 575-528-3630

A/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

ccreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) (EXCELL)

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: GRIGGS WALNUT Ground Water Monitoring Wells

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org
575-528-3609

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

1 of 2

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511470	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B ~~(VOA)~~ VOC	8270 (Semi-VOA)	NITRATE (EPA 300.0)	Arsenic Speciation	Metals & Cations, As & Ill		Air Bubbles (Y or N)
09/15	1002 ~~1002~~	Ground H_2O	CLC-PAZ PARK	3-40ml	$HgCl_2$	-001										X						
						~~-002~~ CS 11/11/15																
10/15	09:12	Ground H_2O	CLC 27-151110	3-40ml	$HgCl_2$	-002										X						
10/15	09:35	Ground H_2O	CLC 18-151110	3-40ml	$HgCl_2$	-003										X						
10/15	10:22	Ground H_2O	CLC26-151110	3-40ml	$HgCl_2$	-004										X						
10/15	10:40	Ground H_2O	CLC20-151110	3-40ml	$HgCl_2$	-005										X						
— LAB	—		TRIP BLANK	2-40ml	$HgCl_2$	-006																
10/15	0935	Ground H_2O	CLC 18-151110	1-125ml	ICE	-003								X								
10/15	0935	Ground H_2O	CLC 18-151110	1-125ml	H_2SO_4	↓												X				
10/15	0935	Ground H_2O	CLC 18-151110	1-500ml	HCl	↓													X			
10/15	0935	Ground H_2O	CLC 18-151110	1-500ml	HNO_3	↓														X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/15	1300	Laura Montoya	[signature]	11/11/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra

Send invoice to CLC c/o Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

2 of 2

Client: City of Las Cruces

Mailing Address: P.O. Box 20000 Las Cruces, NM 88004

Phone #: 575-528-3604

Email or Fax#: 575-528-3630

QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ NELAP ☐ Other

☐ EDD (Type) EXCELL

Turn-Around Time: ☑ Standard ☐ Rush

Project Name: 621665-WALNUT Ground Water Monitoring Wells

Project #:

Project Manager: Luis Guerra lguerra@las-cruces.org 575-528-3609

Sampler: Laura Montoya

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.5

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511470	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)	NITRATE (EPA 300)	Arsenic Speciation	Metals & Cations Ag, Al		Air Bubbles (Y or N)
10/15	0912	Ground H_2O	CLC27-151110	1-125ml	ICE ~~HgCl2~~	-002								X								
	0912	Ground H_2O	CLC27-151110	1-125ml	H_2SO_4	↓												X				
	0912	Ground H_2O	CLC27-151110	1-500ml	HCl														X			
10/15	0912	Ground H_2O	CLC27-151110	1-500ml	HNO_3															X		
10/15	0912	Ground H_2O	CLC27151110 DUPE	1-125ml	ICE	-007								X								
	0912	Ground H_2O	CLC27-151110 DUPE	1-125ml	H_2SO_4	↓												X				
	0912	Ground H_2O	CLC27-151110 DUPE	1-500ml	HCl														X			
10/15	0912	Ground H_2O	CLC27-151110 DUPE	1-500ml	HNO_3															X		
			~~Trip Blank~~			~~-008~~																
			~~11/11/15~~																			
			11/11/15																			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/15	1300	Laura Montoya	[signature]	11/11/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra

Send invoice to City of Las Cruces c/o Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 17, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1511475

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/11/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1511475**
Date Reported: **11/17/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:58:00 AM
Lab ID: 1511475-001
Matrix: AIR
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Toluene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Ethylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Naphthalene	ND	0.20		µg/L	1	11/13/2015 1:30:39 PM	A30246
1-Methylnaphthalene	ND	0.40		µg/L	1	11/13/2015 1:30:39 PM	A30246
2-Methylnaphthalene	ND	0.40		µg/L	1	11/13/2015 1:30:39 PM	A30246
Acetone	ND	1.0		µg/L	1	11/13/2015 1:30:39 PM	A30246
Bromobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Bromodichloromethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Bromoform	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Bromomethane	ND	0.20		µg/L	1	11/13/2015 1:30:39 PM	A30246
2-Butanone	ND	1.0		µg/L	1	11/13/2015 1:30:39 PM	A30246
Carbon disulfide	ND	1.0		µg/L	1	11/13/2015 1:30:39 PM	A30246
Carbon tetrachloride	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Chlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Chloroethane	ND	0.20		µg/L	1	11/13/2015 1:30:39 PM	A30246
Chloroform	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Chloromethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
2-Chlorotoluene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
4-Chlorotoluene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
cis-1,2-DCE	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	11/13/2015 1:30:39 PM	A30246
Dibromochloromethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Dibromomethane	ND	0.20		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2-Dichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,3-Dichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,4-Dichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Dichlorodifluoromethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,1-Dichloroethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,1-Dichloroethene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2-Dichloropropane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,3-Dichloropropane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
2,2-Dichloropropane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1-151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:58:00 AM
Lab ID: 1511475-001
Matrix: AIR
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Hexachlorobutadiene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
2-Hexanone	ND	1.0		µg/L	1	11/13/2015 1:30:39 PM	A30246
Isopropylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
4-Isopropyltoluene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
4-Methyl-2-pentanone	ND	1.0		µg/L	1	11/13/2015 1:30:39 PM	A30246
Methylene chloride	ND	0.30		µg/L	1	11/13/2015 1:30:39 PM	A30246
n-Butylbenzene	ND	0.30		µg/L	1	11/13/2015 1:30:39 PM	A30246
n-Propylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
sec-Butylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Styrene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
tert-Butylbenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
trans-1,2-DCE	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,1,1-Trichloroethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,1,2-Trichloroethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Trichloroethene (TCE)	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Trichlorofluoromethane	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
1,2,3-Trichloropropane	ND	0.20		µg/L	1	11/13/2015 1:30:39 PM	A30246
Vinyl chloride	ND	0.10		µg/L	1	11/13/2015 1:30:39 PM	A30246
Xylenes, Total	ND	0.15		µg/L	1	11/13/2015 1:30:39 PM	A30246
Surr: Dibromofluoromethane	104	70-130		%REC	1	11/13/2015 1:30:39 PM	A30246
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	11/13/2015 1:30:39 PM	A30246
Surr: Toluene-d8	101	70-130		%REC	1	11/13/2015 1:30:39 PM	A30246
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	11/13/2015 1:30:39 PM	A30246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 10:01:00 AM
Lab ID: 1511475-002
Matrix: AIR
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Toluene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Ethylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Naphthalene	ND	0.20		µg/L	1	11/13/2015 1:58:01 PM	A30246
1-Methylnaphthalene	ND	0.40		µg/L	1	11/13/2015 1:58:01 PM	A30246
2-Methylnaphthalene	ND	0.40		µg/L	1	11/13/2015 1:58:01 PM	A30246
Acetone	ND	1.0		µg/L	1	11/13/2015 1:58:01 PM	A30246
Bromobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Bromodichloromethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Bromoform	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Bromomethane	ND	0.20		µg/L	1	11/13/2015 1:58:01 PM	A30246
2-Butanone	ND	1.0		µg/L	1	11/13/2015 1:58:01 PM	A30246
Carbon disulfide	ND	1.0		µg/L	1	11/13/2015 1:58:01 PM	A30246
Carbon tetrachloride	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Chlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Chloroethane	ND	0.20		µg/L	1	11/13/2015 1:58:01 PM	A30246
Chloroform	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Chloromethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
2-Chlorotoluene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
4-Chlorotoluene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
cis-1,2-DCE	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	11/13/2015 1:58:01 PM	A30246
Dibromochloromethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Dibromomethane	ND	0.20		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2-Dichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,3-Dichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,4-Dichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Dichlorodifluoromethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,1-Dichloroethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,1-Dichloroethene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2-Dichloropropane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,3-Dichloropropane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
2,2-Dichloropropane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2-151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 10:01:00 AM
Lab ID: 1511475-002
Matrix: AIR
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Hexachlorobutadiene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
2-Hexanone	ND	1.0		µg/L	1	11/13/2015 1:58:01 PM	A30246
Isopropylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
4-Isopropyltoluene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
4-Methyl-2-pentanone	ND	1.0		µg/L	1	11/13/2015 1:58:01 PM	A30246
Methylene chloride	ND	0.30		µg/L	1	11/13/2015 1:58:01 PM	A30246
n-Butylbenzene	ND	0.30		µg/L	1	11/13/2015 1:58:01 PM	A30246
n-Propylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
sec-Butylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Styrene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
tert-Butylbenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
trans-1,2-DCE	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,1,1-Trichloroethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,1,2-Trichloroethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Trichloroethene (TCE)	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Trichlorofluoromethane	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
1,2,3-Trichloropropane	ND	0.20		µg/L	1	11/13/2015 1:58:01 PM	A30246
Vinyl chloride	ND	0.10		µg/L	1	11/13/2015 1:58:01 PM	A30246
Xylenes, Total	ND	0.15		µg/L	1	11/13/2015 1:58:01 PM	A30246
Surr: Dibromofluoromethane	100	70-130		%REC	1	11/13/2015 1:58:01 PM	A30246
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	11/13/2015 1:58:01 PM	A30246
Surr: Toluene-d8	105	70-130		%REC	1	11/13/2015 1:58:01 PM	A30246
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	11/13/2015 1:58:01 PM	A30246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1511475 RcptNo: 1

Received by/date: LM 11/11/15

Logged By: Celina Sessa 11/11/2015 8:50:00 AM Celina Sessa

Completed By: Celina Sessa 11/11/2015 10:10:08 AM Celina Sessa

Reviewed By: 11/11/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☑
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	N/A	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
Las Cruces, NM 88004
Phone #: 575-528-3604
Email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: JOINT Superfund Process Center-Monthly Samples
Project #: CLC-JSP "62166S-WALNUT"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☐ Yes ☒ No
Sample Temperature: N/A

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511475	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
10/15	9:58	AIR	AS1-151110	1 Tedlar BAG	none	-001										X						
10/15	10:01	AIR	AS2-151110	1 Tedlar BAG	None	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/15	1300	Laura Montoya		11/11/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to CLC c/o Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 17, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund Process Center-Monthly Samples OrderNo.: 1511476

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/11/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:12:00 AM
Lab ID: 1511476-001
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Toluene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Ethylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Naphthalene	ND	2.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Acetone	ND	10		µg/L	1	11/12/2015 11:50:18 AM	R30197
Bromobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Bromoform	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Bromomethane	ND	3.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
2-Butanone	ND	10		µg/L	1	11/12/2015 11:50:18 AM	R30197
Carbon disulfide	ND	10		µg/L	1	11/12/2015 11:50:18 AM	R30197
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Chlorobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Chloroethane	ND	2.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Chloroform	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Chloromethane	ND	3.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Dibromomethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2015 11:50:18 AM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:12:00 AM
Lab ID: 1511476-001
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
2-Hexanone	ND	10		µg/L	1	11/12/2015 11:50:18 AM	R30197
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2015 11:50:18 AM	R30197
Methylene Chloride	ND	3.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Styrene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Tetrachloroethene (PCE)	14	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Vinyl chloride	ND	1.0		µg/L	1	11/12/2015 11:50:18 AM	R30197
Xylenes, Total	ND	1.5		µg/L	1	11/12/2015 11:50:18 AM	R30197
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	11/12/2015 11:50:18 AM	R30197
Surr: 4-Bromofluorobenzene	84.0	70-130		%REC	1	11/12/2015 11:50:18 AM	R30197
Surr: Dibromofluoromethane	89.7	70-130		%REC	1	11/12/2015 11:50:18 AM	R30197
Surr: Toluene-d8	94.2	70-130		%REC	1	11/12/2015 11:50:18 AM	R30197

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:35:00 AM
Lab ID: 1511476-002
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Toluene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Ethylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Naphthalene	ND	2.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Acetone	ND	10		µg/L	1	11/12/2015 1:21:49 PM	R30197
Bromobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Bromoform	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Bromomethane	ND	3.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
2-Butanone	ND	10		µg/L	1	11/12/2015 1:21:49 PM	R30197
Carbon disulfide	ND	10		µg/L	1	11/12/2015 1:21:49 PM	R30197
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Chlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Chloroethane	ND	2.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Chloroform	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Chloromethane	ND	3.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Dibromomethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2015 1:21:49 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:35:00 AM
Lab ID: 1511476-002
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
2-Hexanone	ND	10		µg/L	1	11/12/2015 1:21:49 PM	R30197
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2015 1:21:49 PM	R30197
Methylene Chloride	ND	3.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Styrene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Tetrachloroethene (PCE)	13	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Vinyl chloride	ND	1.0		µg/L	1	11/12/2015 1:21:49 PM	R30197
Xylenes, Total	ND	1.5		µg/L	1	11/12/2015 1:21:49 PM	R30197
Surr: 1,2-Dichloroethane-d4	90.5	70-130		%REC	1	11/12/2015 1:21:49 PM	R30197
Surr: 4-Bromofluorobenzene	84.0	70-130		%REC	1	11/12/2015 1:21:49 PM	R30197
Surr: Dibromofluoromethane	80.6	70-130		%REC	1	11/12/2015 1:21:49 PM	R30197
Surr: Toluene-d8	103	70-130		%REC	1	11/12/2015 1:21:49 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:45:00 AM
Lab ID: 1511476-003
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Toluene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Ethylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Naphthalene	ND	2.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Acetone	ND	10		µg/L	1	11/12/2015 1:52:14 PM	R30197
Bromobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Bromoform	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Bromomethane	ND	3.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
2-Butanone	ND	10		µg/L	1	11/12/2015 1:52:14 PM	R30197
Carbon disulfide	ND	10		µg/L	1	11/12/2015 1:52:14 PM	R30197
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Chlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Chloroethane	ND	2.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Chloroform	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Chloromethane	ND	3.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Dibromomethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2015 1:52:14 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:45:00 AM
Lab ID: 1511476-003
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
2-Hexanone	ND	10		µg/L	1	11/12/2015 1:52:14 PM	R30197
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2015 1:52:14 PM	R30197
Methylene Chloride	ND	3.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Styrene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Tetrachloroethene (PCE)	10	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Vinyl chloride	ND	1.0		µg/L	1	11/12/2015 1:52:14 PM	R30197
Xylenes, Total	ND	1.5		µg/L	1	11/12/2015 1:52:14 PM	R30197
Surr: 1,2-Dichloroethane-d4	85.5	70-130		%REC	1	11/12/2015 1:52:14 PM	R30197
Surr: 4-Bromofluorobenzene	82.1	70-130		%REC	1	11/12/2015 1:52:14 PM	R30197
Surr: Dibromofluoromethane	80.9	70-130		%REC	1	11/12/2015 1:52:14 PM	R30197
Surr: Toluene-d8	97.9	70-130		%REC	1	11/12/2015 1:52:14 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:47:00 AM
Lab ID: 1511476-004
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Toluene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Ethylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Naphthalene	ND	2.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Acetone	ND	10		µg/L	1	11/12/2015 2:22:46 PM	R30197
Bromobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Bromoform	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Bromomethane	ND	3.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
2-Butanone	ND	10		µg/L	1	11/12/2015 2:22:46 PM	R30197
Carbon disulfide	ND	10		µg/L	1	11/12/2015 2:22:46 PM	R30197
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Chlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Chloroethane	ND	2.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Chloroform	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Chloromethane	ND	3.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Dibromomethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2015 2:22:46 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:47:00 AM
Lab ID: 1511476-004
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
2-Hexanone	ND	10		µg/L	1	11/12/2015 2:22:46 PM	R30197
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2015 2:22:46 PM	R30197
Methylene Chloride	ND	3.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Styrene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Vinyl chloride	ND	1.0		µg/L	1	11/12/2015 2:22:46 PM	R30197
Xylenes, Total	ND	1.5		µg/L	1	11/12/2015 2:22:46 PM	R30197
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	1	11/12/2015 2:22:46 PM	R30197
Surr: 4-Bromofluorobenzene	86.8	70-130		%REC	1	11/12/2015 2:22:46 PM	R30197
Surr: Dibromofluoromethane	89.3	70-130		%REC	1	11/12/2015 2:22:46 PM	R30197
Surr: Toluene-d8	90.8	70-130		%REC	1	11/12/2015 2:22:46 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:50:00 AM
Lab ID: 1511476-005
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Toluene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Ethylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Naphthalene	ND	2.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Acetone	ND	10		µg/L	1	11/12/2015 2:53:11 PM	R30197
Bromobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Bromoform	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Bromomethane	ND	3.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
2-Butanone	ND	10		µg/L	1	11/12/2015 2:53:11 PM	R30197
Carbon disulfide	ND	10		µg/L	1	11/12/2015 2:53:11 PM	R30197
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Chlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Chloroethane	ND	2.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Chloroform	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Chloromethane	ND	3.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Dibromomethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2015 2:53:11 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:50:00 AM
Lab ID: 1511476-005
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
2-Hexanone	ND	10		µg/L	1	11/12/2015 2:53:11 PM	R30197
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2015 2:53:11 PM	R30197
Methylene Chloride	ND	3.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Styrene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Vinyl chloride	ND	1.0		µg/L	1	11/12/2015 2:53:11 PM	R30197
Xylenes, Total	ND	1.5		µg/L	1	11/12/2015 2:53:11 PM	R30197
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	1	11/12/2015 2:53:11 PM	R30197
Surr: 4-Bromofluorobenzene	80.9	70-130		%REC	1	11/12/2015 2:53:11 PM	R30197
Surr: Dibromofluoromethane	87.5	70-130		%REC	1	11/12/2015 2:53:11 PM	R30197
Surr: Toluene-d8	94.7	70-130		%REC	1	11/12/2015 2:53:11 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:55:00 AM
Lab ID: 1511476-006
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Toluene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Ethylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Naphthalene	ND	2.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Acetone	ND	10		µg/L	1	11/12/2015 3:23:37 PM	R30197
Bromobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Bromoform	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Bromomethane	ND	3.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
2-Butanone	ND	10		µg/L	1	11/12/2015 3:23:37 PM	R30197
Carbon disulfide	ND	10		µg/L	1	11/12/2015 3:23:37 PM	R30197
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Chlorobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Chloroethane	ND	2.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Chloroform	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Chloromethane	ND	3.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Dibromomethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2015 3:23:37 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151110
Project: Joint Superfund Process Center-Monthly
Collection Date: 11/10/2015 9:55:00 AM
Lab ID: 1511476-006
Matrix: AQUEOUS
Received Date: 11/11/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
2-Hexanone	ND	10		µg/L	1	11/12/2015 3:23:37 PM	R30197
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2015 3:23:37 PM	R30197
Methylene Chloride	ND	3.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Styrene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Vinyl chloride	ND	1.0		µg/L	1	11/12/2015 3:23:37 PM	R30197
Xylenes, Total	ND	1.5		µg/L	1	11/12/2015 3:23:37 PM	R30197
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	11/12/2015 3:23:37 PM	R30197
Surr: 4-Bromofluorobenzene	79.9	70-130		%REC	1	11/12/2015 3:23:37 PM	R30197
Surr: Dibromofluoromethane	80.0	70-130		%REC	1	11/12/2015 3:23:37 PM	R30197
Surr: Toluene-d8	92.2	70-130		%REC	1	11/12/2015 3:23:37 PM	R30197

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511476**
17-Nov-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30197** RunNo: **30197**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **920073** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.9	70	130			
Toluene	20	1.0	20.00	0	98.4	70	130			
Chlorobenzene	18	1.0	20.00	0	91.3	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.9	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.9	70	130			
Surr: Dibromofluoromethane	8.6		10.00		86.2	70	130			
Surr: Toluene-d8	9.1		10.00		91.2	70	130			

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30197** RunNo: **30197**
Prep Date: Analysis Date: **11/12/2015** SeqNo: **920074** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511476**
17-Nov-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30197**	RunNo: **30197**			
Prep Date:	Analysis Date: **11/12/2015**	SeqNo: **920074**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511476**
17-Nov-15

Client: City of Las Cruces
Project: Joint Superfund Process Center-Monthly Sample

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30197**	RunNo: **30197**			
Prep Date:	Analysis Date: **11/12/2015**	SeqNo: **920074**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.1	70	130			
Surr: 4-Bromofluorobenzene	8.4		10.00		84.2	70	130			
Surr: Dibromofluoromethane	8.6		10.00		86.3	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1511476 RcptNo: 1

Received by/date: LM 11/11/15

Logged By: Celina Sessa 11/11/2015 8:50:00 AM Celina Sessa

Completed By: Celina Sessa 11/11/2015 10:13:34 AM Celina Sessa

Reviewed By: 11/11/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.4	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
Las Cruces, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: Joint Superfund (JSP) Process Center - Monthly Samples
Project #: CLC-JSP "6R166S - WALNUT"
Project Manager: Luis Guerra
575-528-3609
lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511476	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
10/15	09:12	Drink H2O	CLC27_151110	3-40ml	HgCl2	-001										X						
	09:35		CLC18_151110	3-40ml	HgCl2	-002										X						
	09:45		ISI_151110	3-40ml	HgCl2	-003										X						
	09:47		C1_151110	3-40ml	HgCl2	-004										X						
	09:50		C2_151110	3-40ml	HgCl2	-005										X						
10/15	09:55	Drink H2O	ESI_151110	3-40ml	HgCl2	-006										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/15	13:00	Laura Montoya		11/11/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to CLC c/o Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 20, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: GRIGGS-WALNUT (JSP) Ground H2O Monitoring Wells OrderNo.: 1511679

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/17/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1511679**
Date Reported: **11/20/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-I_151112
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/12/2015 1:12:00 PM
Lab ID: 1511679-001
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Toluene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Ethylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Naphthalene	ND	2.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Acetone	ND	10		µg/L	1	11/18/2015 9:18:13 AM	a30292
Bromobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Bromoform	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Bromomethane	ND	3.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
2-Butanone	ND	10		µg/L	1	11/18/2015 9:18:13 AM	a30292
Carbon disulfide	ND	10		µg/L	1	11/18/2015 9:18:13 AM	a30292
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Chlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Chloroethane	ND	2.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Chloroform	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Chloromethane	ND	3.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Dibromomethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2015 9:18:13 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-I_151112
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/12/2015 1:12:00 PM
Lab ID: 1511679-001
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
2-Hexanone	ND	10		µg/L	1	11/18/2015 9:18:13 AM	a30292
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2015 9:18:13 AM	a30292
Methylene Chloride	ND	3.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Styrene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Tetrachloroethene (PCE)	2.0	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Vinyl chloride	ND	1.0		µg/L	1	11/18/2015 9:18:13 AM	a30292
Xylenes, Total	ND	1.5		µg/L	1	11/18/2015 9:18:13 AM	a30292
Surr: 1,2-Dichloroethane-d4	84.1	70-130		%REC	1	11/18/2015 9:18:13 AM	a30292
Surr: 4-Bromofluorobenzene	77.7	70-130		%REC	1	11/18/2015 9:18:13 AM	a30292
Surr: Dibromofluoromethane	84.0	70-130		%REC	1	11/18/2015 9:18:13 AM	a30292
Surr: Toluene-d8	94.5	70-130		%REC	1	11/18/2015 9:18:13 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-D_151113
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/13/2015 11:25:00 AM
Lab ID: 1511679-002
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Toluene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Ethylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Naphthalene	ND	2.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Acetone	ND	10		µg/L	1	11/18/2015 9:48:41 AM	a30292
Bromobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Bromoform	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Bromomethane	ND	3.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
2-Butanone	ND	10		µg/L	1	11/18/2015 9:48:41 AM	a30292
Carbon disulfide	ND	10		µg/L	1	11/18/2015 9:48:41 AM	a30292
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Chlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Chloroethane	ND	2.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Chloroform	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Chloromethane	ND	3.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Dibromomethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2015 9:48:41 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-D_151113
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/13/2015 11:25:00 AM
Lab ID: 1511679-002
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
2-Hexanone	ND	10		µg/L	1	11/18/2015 9:48:41 AM	a30292
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2015 9:48:41 AM	a30292
Methylene Chloride	ND	3.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Styrene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Vinyl chloride	ND	1.0		µg/L	1	11/18/2015 9:48:41 AM	a30292
Xylenes, Total	ND	1.5		µg/L	1	11/18/2015 9:48:41 AM	a30292
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	11/18/2015 9:48:41 AM	a30292
Surr: 4-Bromofluorobenzene	81.8	70-130		%REC	1	11/18/2015 9:48:41 AM	a30292
Surr: Dibromofluoromethane	92.7	70-130		%REC	1	11/18/2015 9:48:41 AM	a30292
Surr: Toluene-d8	93.6	70-130		%REC	1	11/18/2015 9:48:41 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-S_151113
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/13/2015 1:45:00 PM
Lab ID: 1511679-003
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Toluene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Ethylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Naphthalene	ND	2.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Acetone	ND	10		µg/L	1	11/18/2015 10:19:09 AM	a30292
Bromobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Bromoform	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Bromomethane	ND	3.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
2-Butanone	ND	10		µg/L	1	11/18/2015 10:19:09 AM	a30292
Carbon disulfide	ND	10		µg/L	1	11/18/2015 10:19:09 AM	a30292
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Chlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Chloroethane	ND	2.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Chloroform	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Chloromethane	ND	3.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Dibromomethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2015 10:19:09 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-S_151113
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/13/2015 1:45:00 PM
Lab ID: 1511679-003
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
2-Hexanone	ND	10		µg/L	1	11/18/2015 10:19:09 AM	a30292
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2015 10:19:09 AM	a30292
Methylene Chloride	ND	3.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Styrene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Vinyl chloride	ND	1.0		µg/L	1	11/18/2015 10:19:09 AM	a30292
Xylenes, Total	ND	1.5		µg/L	1	11/18/2015 10:19:09 AM	a30292
Surr: 1,2-Dichloroethane-d4	83.4	70-130		%REC	1	11/18/2015 10:19:09 AM	a30292
Surr: 4-Bromofluorobenzene	77.6	70-130		%REC	1	11/18/2015 10:19:09 AM	a30292
Surr: Dibromofluoromethane	86.3	70-130		%REC	1	11/18/2015 10:19:09 AM	a30292
Surr: Toluene-d8	94.5	70-130		%REC	1	11/18/2015 10:19:09 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-S_151113DUPE
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/13/2015 1:48:00 PM
Lab ID: 1511679-004
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Toluene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Ethylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Naphthalene	ND	2.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Acetone	ND	10		µg/L	1	11/18/2015 10:49:45 AM	a30292
Bromobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Bromoform	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Bromomethane	ND	3.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
2-Butanone	ND	10		µg/L	1	11/18/2015 10:49:45 AM	a30292
Carbon disulfide	ND	10		µg/L	1	11/18/2015 10:49:45 AM	a30292
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Chlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Chloroethane	ND	2.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Chloroform	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Chloromethane	ND	3.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Dibromomethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2015 10:49:45 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW11-S_151113DUPE
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/13/2015 1:48:00 PM
Lab ID: 1511679-004
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
2-Hexanone	ND	10		µg/L	1	11/18/2015 10:49:45 AM	a30292
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2015 10:49:45 AM	a30292
Methylene Chloride	ND	3.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Styrene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Vinyl chloride	ND	1.0		µg/L	1	11/18/2015 10:49:45 AM	a30292
Xylenes, Total	ND	1.5		µg/L	1	11/18/2015 10:49:45 AM	a30292
Surr: 1,2-Dichloroethane-d4	87.3	70-130		%REC	1	11/18/2015 10:49:45 AM	a30292
Surr: 4-Bromofluorobenzene	76.5	70-130		%REC	1	11/18/2015 10:49:45 AM	a30292
Surr: Dibromofluoromethane	83.8	70-130		%REC	1	11/18/2015 10:49:45 AM	a30292
Surr: Toluene-d8	94.0	70-130		%REC	1	11/18/2015 10:49:45 AM	a30292

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW15-D_151116
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/16/2015 11:59:00 AM
Lab ID: 1511679-005
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Toluene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Ethylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Naphthalene	ND	2.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Acetone	ND	10		µg/L	1	11/18/2015 6:52:24 PM	R30325
Bromobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Bromoform	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Bromomethane	ND	3.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
2-Butanone	ND	10		µg/L	1	11/18/2015 6:52:24 PM	R30325
Carbon disulfide	ND	10		µg/L	1	11/18/2015 6:52:24 PM	R30325
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Chlorobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Chloroethane	ND	2.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Chloroform	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Chloromethane	ND	3.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Dibromomethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2015 6:52:24 PM	R30325

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW15-D_151116
Project: GRIGGS-WALNUT (JSP) Ground H2O
Collection Date: 11/16/2015 11:59:00 AM
Lab ID: 1511679-005
Matrix: AQUEOUS
Received Date: 11/17/2015 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
2-Hexanone	ND	10		µg/L	1	11/18/2015 6:52:24 PM	R30325
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2015 6:52:24 PM	R30325
Methylene Chloride	ND	3.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Styrene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Vinyl chloride	ND	1.0		µg/L	1	11/18/2015 6:52:24 PM	R30325
Xylenes, Total	ND	1.5		µg/L	1	11/18/2015 6:52:24 PM	R30325
Surr: 1,2-Dichloroethane-d4	84.0	70-130		%REC	1	11/18/2015 6:52:24 PM	R30325
Surr: 4-Bromofluorobenzene	78.1	70-130		%REC	1	11/18/2015 6:52:24 PM	R30325
Surr: Dibromofluoromethane	83.6	70-130		%REC	1	11/18/2015 6:52:24 PM	R30325
Surr: Toluene-d8	91.4	70-130		%REC	1	11/18/2015 6:52:24 PM	R30325

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511679**
20-Nov-15

Client: City of Las Cruces
Project: GRIGGS-WALNUT (JSP) Ground H2O Monito

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30292** RunNo: **30292**
Prep Date: Analysis Date: **11/17/2015** SeqNo: **923998** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.6	70	130			
Surr: 4-Bromofluorobenzene	8.1		10.00		80.7	70	130			
Surr: Dibromofluoromethane	8.2		10.00		82.4	70	130			
Surr: Toluene-d8	8.9		10.00		89.5	70	130			

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30292** RunNo: **30292**
Prep Date: Analysis Date: **11/17/2015** SeqNo: **923999** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		79.9	70	130			
Surr: Dibromofluoromethane	9.2		10.00		91.9	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID **100ng LCS2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **a30292** RunNo: **30292**
Prep Date: Analysis Date: **11/18/2015** SeqNo: **924225** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	18	1.0	20.00	0	90.5	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.2	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.1	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.7	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		79.9	70	130			
Surr: Dibromofluoromethane	8.5		10.00		84.6	70	130			
Surr: Toluene-d8	8.9		10.00		88.6	70	130			

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **a30292** RunNo: **30292**
Prep Date: Analysis Date: **11/18/2015** SeqNo: **924226** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511679**
20-Nov-15

Client: City of Las Cruces
Project: GRIGGS-WALNUT (JSP) Ground H2O Monito

Sample ID	**rb3**	SampType:	**MBLK**		TestCode:	**EPA Method 8260B: VOLATILES**					
Client ID:	**PBW**	Batch ID:	**a30292**		RunNo:	**30292**					
Prep Date:		Analysis Date:	**11/18/2015**		SeqNo:	**924226**	Units:	**µg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene		ND	1.0								
1,2-Dichloroethane (EDC)		ND	1.0								
1,2-Dibromoethane (EDB)		ND	1.0								
Naphthalene		ND	2.0								
1-Methylnaphthalene		ND	4.0								
2-Methylnaphthalene		ND	4.0								
Acetone		ND	10								
Bromobenzene		ND	1.0								
Bromodichloromethane		ND	1.0								
Bromoform		ND	1.0								
Bromomethane		ND	3.0								
2-Butanone		ND	10								
Carbon disulfide		ND	10								
Carbon Tetrachloride		ND	1.0								
Chlorobenzene		ND	1.0								
Chloroethane		ND	2.0								
Chloroform		ND	1.0								
Chloromethane		ND	3.0								
2-Chlorotoluene		ND	1.0								
4-Chlorotoluene		ND	1.0								
cis-1,2-DCE		ND	1.0								
cis-1,3-Dichloropropene		ND	1.0								
1,2-Dibromo-3-chloropropane		ND	2.0								
Dibromochloromethane		ND	1.0								
Dibromomethane		ND	1.0								
1,2-Dichlorobenzene		ND	1.0								
1,3-Dichlorobenzene		ND	1.0								
1,4-Dichlorobenzene		ND	1.0								
Dichlorodifluoromethane		ND	1.0								
1,1-Dichloroethane		ND	1.0								
1,1-Dichloroethene		ND	1.0								
1,2-Dichloropropane		ND	1.0								
1,3-Dichloropropane		ND	1.0								
2,2-Dichloropropane		ND	2.0								
1,1-Dichloropropene		ND	1.0								
Hexachlorobutadiene		ND	1.0								
2-Hexanone		ND	10								
Isopropylbenzene		ND	1.0								
4-Isopropyltoluene		ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511679**
20-Nov-15

Client: City of Las Cruces
Project: GRIGGS-WALNUT (JSP) Ground H2O Monito

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **a30292** RunNo: **30292**
Prep Date: Analysis Date: **11/18/2015** SeqNo: **924226** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.8	70	130			
Surr: 4-Bromofluorobenzene	8.2		10.00		82.2	70	130			
Surr: Dibromofluoromethane	7.9		10.00		79.4	70	130			
Surr: Toluene-d8	9.1		10.00		91.2	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30325** RunNo: **30325**
Prep Date: Analysis Date: **11/18/2015** SeqNo: **925353** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	102	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	7.9		10.00		79.0	70	130			
Surr: Dibromofluoromethane	8.6		10.00		85.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511679**
20-Nov-15

Client: City of Las Cruces
Project: GRIGGS-WALNUT (JSP) Ground H2O Monito

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30325** RunNo: **30325**
Prep Date: Analysis Date: **11/18/2015** SeqNo: **925353** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.2		10.00		92.1	70	130			

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30325** RunNo: **30325**
Prep Date: Analysis Date: **11/18/2015** SeqNo: **925523** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511679**
20-Nov-15

Client: City of Las Cruces
Project: GRIGGS-WALNUT (JSP) Ground H2O Monito

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30325**	RunNo: **30325**			
Prep Date:	Analysis Date: **11/18/2015**	SeqNo: **925523**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.7	70	130			
Surr: 4-Bromofluorobenzene	8.1		10.00		80.6	70	130			
Surr: Dibromofluoromethane	8.5		10.00		85.2	70	130			
Surr: Toluene-d8	8.9		10.00		89.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1511679 RcptNo: 1

Received by/date: CS 11/17/15

Logged By: Ashley Gallegos 11/17/2015 8:50:00 AM AG

Completed By: Ashley Gallegos 11/17/2015 9:37:30 AM AG

Reviewed By: CS 11/17/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces NM 88004

Phone #: 575-528-3604

Email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: GR466S-WALNUT (JSP) Ground H2O Monitoring Wells

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org
575-528-3609

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.8°C -1.0 CF = 3.8°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511679	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
12/15	1312	Ground H2O	GWMW11-I-151112	3-40ml	HgCl2	-001										X						
13/15	1125	Ground H2O	GWMW11-D-151113	3-40ml	HgCl2	-002										X						
3/15	1345	Ground H2O	GWMW11-S-151113	3-40ml	HgCl2	-003										X						
3/15	1348	Ground H2O	GWMW11-S-151113 Dupe	3-40ml	HgCl2	-004										X						
16/15	1159	Ground H2O	GWMW15-D-151116	3-40ml	HgCl2	-005										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
16/15	1415	Laura Montoya	Celina Sum	11/17/15	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to CLC c/o Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 23, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: GRIGGS WALNUT (JSP) Ground H2O Monitoring Wells OrderNo.: 1511875

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/19/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1511875**
Date Reported: **11/23/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-15I_151117
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date: 11/17/2015 10:05:00 AM
Lab ID: 1511875-001
Matrix: AQUEOUS
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Toluene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Ethylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Naphthalene	ND	2.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
2-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Acetone	ND	10		µg/L	1	11/19/2015 1:54:36 PM	R30359
Bromobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Bromodichloromethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Bromoform	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Bromomethane	ND	3.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
2-Butanone	ND	10		µg/L	1	11/19/2015 1:54:36 PM	R30359
Carbon disulfide	ND	10		µg/L	1	11/19/2015 1:54:36 PM	R30359
Carbon Tetrachloride	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Chlorobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Chloroethane	ND	2.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Chloroform	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Chloromethane	ND	3.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
2-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
4-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
cis-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Dibromochloromethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Dibromomethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,1-Dichloroethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,1-Dichloroethene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,3-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
2,2-Dichloropropane	ND	2.0		µg/L	1	11/19/2015 1:54:36 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-15I_151117
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date: 11/17/2015 10:05:00 AM
Lab ID: 1511875-001
Matrix: AQUEOUS
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Hexachlorobutadiene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
2-Hexanone	ND	10		µg/L	1	11/19/2015 1:54:36 PM	R30359
Isopropylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
4-Isopropyltoluene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
4-Methyl-2-pentanone	ND	10		µg/L	1	11/19/2015 1:54:36 PM	R30359
Methylene Chloride	ND	3.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
n-Butylbenzene	ND	3.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
n-Propylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
sec-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Styrene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
tert-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Tetrachloroethene (PCE)	6.1	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
trans-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Trichlorofluoromethane	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Vinyl chloride	ND	1.0		µg/L	1	11/19/2015 1:54:36 PM	R30359
Xylenes, Total	ND	1.5		µg/L	1	11/19/2015 1:54:36 PM	R30359
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	11/19/2015 1:54:36 PM	R30359
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	11/19/2015 1:54:36 PM	R30359
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	11/19/2015 1:54:36 PM	R30359
Surr: Toluene-d8	110	70-130		%REC	1	11/19/2015 1:54:36 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-15S_151117
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date: 11/17/2015 1:09:00 PM
Lab ID: 1511875-002
Matrix: AQUEOUS
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Toluene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Ethylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Naphthalene	ND	2.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
2-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Acetone	ND	10		µg/L	1	11/19/2015 3:21:00 PM	R30359
Bromobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Bromodichloromethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Bromoform	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Bromomethane	ND	3.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
2-Butanone	ND	10		µg/L	1	11/19/2015 3:21:00 PM	R30359
Carbon disulfide	ND	10		µg/L	1	11/19/2015 3:21:00 PM	R30359
Carbon Tetrachloride	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Chlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Chloroethane	ND	2.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Chloroform	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Chloromethane	ND	3.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
2-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
4-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
cis-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Dibromochloromethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Dibromomethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,1-Dichloroethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,1-Dichloroethene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,3-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
2,2-Dichloropropane	ND	2.0		µg/L	1	11/19/2015 3:21:00 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-15S_151117
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date: 11/17/2015 1:09:00 PM
Lab ID: 1511875-002
Matrix: AQUEOUS
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Hexachlorobutadiene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
2-Hexanone	ND	10		µg/L	1	11/19/2015 3:21:00 PM	R30359
Isopropylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
4-Isopropyltoluene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
4-Methyl-2-pentanone	ND	10		µg/L	1	11/19/2015 3:21:00 PM	R30359
Methylene Chloride	ND	3.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
n-Butylbenzene	ND	3.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
n-Propylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
sec-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Styrene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
tert-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
trans-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Trichlorofluoromethane	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Vinyl chloride	ND	1.0		µg/L	1	11/19/2015 3:21:00 PM	R30359
Xylenes, Total	ND	1.5		µg/L	1	11/19/2015 3:21:00 PM	R30359
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	11/19/2015 3:21:00 PM	R30359
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	11/19/2015 3:21:00 PM	R30359
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	11/19/2015 3:21:00 PM	R30359
Surr: Toluene-d8	95.5	70-130		%REC	1	11/19/2015 3:21:00 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLCS7_151118
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date: 11/18/2015 10:51:00 AM
Lab ID: 1511875-003
Matrix: AQUEOUS
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Toluene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Ethylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Naphthalene	ND	2.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
2-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Acetone	ND	10		µg/L	1	11/19/2015 3:49:42 PM	R30359
Bromobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Bromodichloromethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Bromoform	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Bromomethane	ND	3.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
2-Butanone	ND	10		µg/L	1	11/19/2015 3:49:42 PM	R30359
Carbon disulfide	ND	10		µg/L	1	11/19/2015 3:49:42 PM	R30359
Carbon Tetrachloride	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Chlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Chloroethane	ND	2.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Chloroform	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Chloromethane	ND	3.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
2-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
4-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
cis-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Dibromochloromethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Dibromomethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,1-Dichloroethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,1-Dichloroethene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,3-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
2,2-Dichloropropane	ND	2.0		µg/L	1	11/19/2015 3:49:42 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLCS7_151118
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date: 11/18/2015 10:51:00 AM
Lab ID: 1511875-003
Matrix: AQUEOUS
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Hexachlorobutadiene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
2-Hexanone	ND	10		µg/L	1	11/19/2015 3:49:42 PM	R30359
Isopropylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
4-Isopropyltoluene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
4-Methyl-2-pentanone	ND	10		µg/L	1	11/19/2015 3:49:42 PM	R30359
Methylene Chloride	ND	3.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
n-Butylbenzene	ND	3.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
n-Propylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
sec-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Styrene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
tert-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
trans-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Trichlorofluoromethane	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Vinyl chloride	ND	1.0		µg/L	1	11/19/2015 3:49:42 PM	R30359
Xylenes, Total	ND	1.5		µg/L	1	11/19/2015 3:49:42 PM	R30359
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	11/19/2015 3:49:42 PM	R30359
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	11/19/2015 3:49:42 PM	R30359
Surr: Dibromofluoromethane	103	70-130		%REC	1	11/19/2015 3:49:42 PM	R30359
Surr: Toluene-d8	122	70-130		%REC	1	11/19/2015 3:49:42 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date:
Lab ID: 1511875-004
Matrix: TRIP BLANK
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Toluene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Ethylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Naphthalene	ND	2.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
2-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Acetone	ND	10		µg/L	1	11/19/2015 4:18:24 PM	R30359
Bromobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Bromodichloromethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Bromoform	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Bromomethane	ND	3.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
2-Butanone	ND	10		µg/L	1	11/19/2015 4:18:24 PM	R30359
Carbon disulfide	ND	10		µg/L	1	11/19/2015 4:18:24 PM	R30359
Carbon Tetrachloride	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Chlorobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Chloroethane	ND	2.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Chloroform	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Chloromethane	ND	3.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
2-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
4-Chlorotoluene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
cis-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Dibromochloromethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Dibromomethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,1-Dichloroethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,1-Dichloroethene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,3-Dichloropropane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
2,2-Dichloropropane	ND	2.0		µg/L	1	11/19/2015 4:18:24 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: GRIGGS WALNUT (JSP) Ground H2O
Collection Date:
Lab ID: 1511875-004
Matrix: TRIP BLANK
Received Date: 11/19/2015 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Hexachlorobutadiene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
2-Hexanone	ND	10		µg/L	1	11/19/2015 4:18:24 PM	R30359
Isopropylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
4-Isopropyltoluene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
4-Methyl-2-pentanone	ND	10		µg/L	1	11/19/2015 4:18:24 PM	R30359
Methylene Chloride	ND	3.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
n-Butylbenzene	ND	3.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
n-Propylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
sec-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Styrene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
tert-Butylbenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
trans-1,2-DCE	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Trichlorofluoromethane	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Vinyl chloride	ND	1.0		µg/L	1	11/19/2015 4:18:24 PM	R30359
Xylenes, Total	ND	1.5		µg/L	1	11/19/2015 4:18:24 PM	R30359
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%REC	1	11/19/2015 4:18:24 PM	R30359
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	11/19/2015 4:18:24 PM	R30359
Surr: Dibromofluoromethane	102	70-130		%REC	1	11/19/2015 4:18:24 PM	R30359
Surr: Toluene-d8	111	70-130		%REC	1	11/19/2015 4:18:24 PM	R30359

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511875**
23-Nov-15

Client: City of Las Cruces
Project: GRIGGS WALNUT (JSP) Ground H2O Monito

Sample ID **100ng lcs3** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30359** RunNo: **30359**
Prep Date: Analysis Date: **11/19/2015** SeqNo: **926791** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	16	1.0	20.00	0	78.8	70	130			
Toluene	17	1.0	20.00	0	86.9	70	130			
Chlorobenzene	16	1.0	20.00	0	78.0	70	130			
1,1-Dichloroethene	16	1.0	20.00	0	80.6	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	80.7	70	130			
Surr: 1,2-Dichloroethane-d4	12		10.00		115	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.2	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	11		10.00		111	70	130			

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30359** RunNo: **30359**
Prep Date: Analysis Date: **11/19/2015** SeqNo: **926792** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511875**
23-Nov-15

Client: City of Las Cruces
Project: GRIGGS WALNUT (JSP) Ground H2O Monito

Sample ID **rb3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30359**	RunNo: **30359**			
Prep Date:	Analysis Date: **11/19/2015**	SeqNo: **926792**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1511875**
23-Nov-15

Client: City of Las Cruces
Project: GRIGGS WALNUT (JSP) Ground H2O Monito

Sample ID **rb3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30359**	RunNo: **30359**			
Prep Date:	Analysis Date: **11/19/2015**	SeqNo: **926792**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.0	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.8	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1511875 RcptNo: 1

Received by/date: CS 11/19/15

Logged By: Ashley Gallegos 11/19/2015 9:45:00 AM

Completed By: Ashley Gallegos 11/19/2015 11:01:17 AM

Reviewed By: IO 11/19/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces, NM 88004

Phone #: 575-528-3604

Email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: 6R1665-WALNUT (JSP) Ground H2O Monitoring wells

Project #:

Project Manager: Luis Guerra
lguerra@las-cruces.org
575-528-3609

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.8-1.0CF = 1.8°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511875	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
7/15	10:05	Ground H2O	GWMW-15I_151117	3-40ml	$HgCl_2$	-001										X						
7/15	13:09	Ground H2O	GWMW-15S_151117	3-40ml	$HgCl_2$	-002										X						
8/15	10:51	Ground H2O	CLCS7_151118	3-40ml	$HgCl_2$	-003										X						
8/15	UNK	LAB H2O	TRIP BLANK	2-40ml	$HgCl_2$	-004										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/15	1445	Laura Montoya	Celina Sm	11/19/15	0945
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to CLC % Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 14, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Griggs/Walnut GW (JSP) Ground H2O Monitoring Wells OrderNo.: 1512261

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 20 sample(s) on 12/5/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-01-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 9:50:00 AM
Lab ID: 1512261-001
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Toluene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Acetone	ND	10		µg/L	1	12/10/2015 2:16:41 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 2:16:41 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 2:16:41 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 2:16:41 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-01-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 9:50:00 AM
Lab ID: 1512261-001
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 2:16:41 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 2:16:41 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Tetrachloroethene (PCE)	1.2	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 2:16:41 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 2:16:41 PM	R30770
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	12/10/2015 2:16:41 PM	R30770
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	1	12/10/2015 2:16:41 PM	R30770
Surr: Dibromofluoromethane	100	70-130		%REC	1	12/10/2015 2:16:41 PM	R30770
Surr: Toluene-d8	111	70-130		%REC	1	12/10/2015 2:16:41 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-02-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 9:52:00 AM
Lab ID: 1512261-002
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Toluene	4.0	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Acetone	37	10		µg/L	1	12/10/2015 2:45:31 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 2:45:31 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 2:45:31 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 2:45:31 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-02-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 9:52:00 AM
Lab ID: 1512261-002
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 2:45:31 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 2:45:31 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Tetrachloroethene (PCE)	4.4	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 2:45:31 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 2:45:31 PM	R30770
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	12/10/2015 2:45:31 PM	R30770
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1	12/10/2015 2:45:31 PM	R30770
Surr: Dibromofluoromethane	101	70-130		%REC	1	12/10/2015 2:45:31 PM	R30770
Surr: Toluene-d8	113	70-130		%REC	1	12/10/2015 2:45:31 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-03-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 9:54:00 AM
Lab ID: 1512261-003
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Toluene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Acetone	ND	10		µg/L	1	12/10/2015 3:14:13 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 3:14:13 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 3:14:13 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 3:14:13 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-03-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 9:54:00 AM
Lab ID: 1512261-003
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 3:14:13 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 3:14:13 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Tetrachloroethene (PCE)	1.8	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 3:14:13 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 3:14:13 PM	R30770
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	12/10/2015 3:14:13 PM	R30770
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	1	12/10/2015 3:14:13 PM	R30770
Surr: Dibromofluoromethane	91.2	70-130		%REC	1	12/10/2015 3:14:13 PM	R30770
Surr: Toluene-d8	106	70-130		%REC	1	12/10/2015 3:14:13 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-04-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:07:00 AM
Lab ID: 1512261-004
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	1.1	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Toluene	7.4	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Acetone	37	10		µg/L	1	12/10/2015 3:42:54 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 3:42:54 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 3:42:54 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 3:42:54 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-04-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:07:00 AM
Lab ID: 1512261-004
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 3:42:54 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 3:42:54 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Tetrachloroethene (PCE)	1.2	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 3:42:54 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 3:42:54 PM	R30770
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	12/10/2015 3:42:54 PM	R30770
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	1	12/10/2015 3:42:54 PM	R30770
Surr: Dibromofluoromethane	107	70-130		%REC	1	12/10/2015 3:42:54 PM	R30770
Surr: Toluene-d8	99.4	70-130		%REC	1	12/10/2015 3:42:54 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-05-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:08:00 AM
Lab ID: 1512261-005
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Toluene	2.7	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Acetone	17	10		µg/L	1	12/10/2015 4:11:38 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 4:11:38 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 4:11:38 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 4:11:38 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-05-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:08:00 AM
Lab ID: 1512261-005
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 4:11:38 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 4:11:38 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 4:11:38 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 4:11:38 PM	R30770
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	12/10/2015 4:11:38 PM	R30770
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	1	12/10/2015 4:11:38 PM	R30770
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	12/10/2015 4:11:38 PM	R30770
Surr: Toluene-d8	102	70-130		%REC	1	12/10/2015 4:11:38 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-06-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:17:00 AM
Lab ID: 1512261-006
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Toluene	12	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Acetone	13	10		µg/L	1	12/10/2015 4:40:31 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 4:40:31 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 4:40:31 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 4:40:31 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-06-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:17:00 AM
Lab ID: 1512261-006
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 4:40:31 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 4:40:31 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 4:40:31 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 4:40:31 PM	R30770
Surr: 1,2-Dichloroethane-d4	115	70-130		%REC	1	12/10/2015 4:40:31 PM	R30770
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	1	12/10/2015 4:40:31 PM	R30770
Surr: Dibromofluoromethane	113	70-130		%REC	1	12/10/2015 4:40:31 PM	R30770
Surr: Toluene-d8	105	70-130		%REC	1	12/10/2015 4:40:31 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-07-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:18:00 AM
Lab ID: 1512261-007
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Toluene	2.5	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Acetone	ND	10		µg/L	1	12/10/2015 5:09:24 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 5:09:24 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 5:09:24 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 5:09:24 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW10-07-151202
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/2/2015 10:18:00 AM
Lab ID: 1512261-007
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 5:09:24 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 5:09:24 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Tetrachloroethene (PCE)	4.2	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 5:09:24 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 5:09:24 PM	R30770
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	1	12/10/2015 5:09:24 PM	R30770
Surr: 4-Bromofluorobenzene	88.0	70-130		%REC	1	12/10/2015 5:09:24 PM	R30770
Surr: Dibromofluoromethane	101	70-130		%REC	1	12/10/2015 5:09:24 PM	R30770
Surr: Toluene-d8	109	70-130		%REC	1	12/10/2015 5:09:24 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-16D-151203
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/3/2015 2:02:00 PM
Lab ID: 1512261-008
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Toluene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Acetone	ND	10		µg/L	1	12/10/2015 5:38:09 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 5:38:09 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 5:38:09 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 5:38:09 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-16D-151203
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/3/2015 2:02:00 PM
Lab ID: 1512261-008
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 5:38:09 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 5:38:09 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Tetrachloroethene (PCE)	3.1	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 5:38:09 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 5:38:09 PM	R30770
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	12/10/2015 5:38:09 PM	R30770
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	12/10/2015 5:38:09 PM	R30770
Surr: Dibromofluoromethane	102	70-130		%REC	1	12/10/2015 5:38:09 PM	R30770
Surr: Toluene-d8	102	70-130		%REC	1	12/10/2015 5:38:09 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-16S-151204
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/4/2015 1:32:00 PM
Lab ID: 1512261-009
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Toluene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Acetone	ND	10		µg/L	1	12/10/2015 6:06:51 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 6:06:51 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 6:06:51 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 6:06:51 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW-16S-151204
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/4/2015 1:32:00 PM
Lab ID: 1512261-009
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 6:06:51 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 6:06:51 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Tetrachloroethene (PCE)	1.6	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 6:06:51 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 6:06:51 PM	R30770
Surr: 1,2-Dichloroethane-d4	117	70-130		%REC	1	12/10/2015 6:06:51 PM	R30770
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	1	12/10/2015 6:06:51 PM	R30770
Surr: Dibromofluoromethane	112	70-130		%REC	1	12/10/2015 6:06:51 PM	R30770
Surr: Toluene-d8	107	70-130		%REC	1	12/10/2015 6:06:51 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-01-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 2:35:00 PM
Lab ID: 1512261-010
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Toluene	4.2	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Acetone	ND	10		µg/L	1	12/10/2015 6:35:28 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 6:35:28 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 6:35:28 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 6:35:28 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-01-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 2:35:00 PM
Lab ID: 1512261-010
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 6:35:28 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 6:35:28 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 6:35:28 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 6:35:28 PM	R30770
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%REC	1	12/10/2015 6:35:28 PM	R30770
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	1	12/10/2015 6:35:28 PM	R30770
Surr: Dibromofluoromethane	91.8	70-130		%REC	1	12/10/2015 6:35:28 PM	R30770
Surr: Toluene-d8	98.1	70-130		%REC	1	12/10/2015 6:35:28 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-02-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 2:38:00 PM
Lab ID: 1512261-011
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	2.1	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Toluene	24	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Acetone	21	10		µg/L	1	12/10/2015 7:04:10 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
2-Butanone	17	10		µg/L	1	12/10/2015 7:04:10 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 7:04:10 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 7:04:10 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-02-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 2:38:00 PM
Lab ID: 1512261-011
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 7:04:10 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 7:04:10 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 7:04:10 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 7:04:10 PM	R30770
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%REC	1	12/10/2015 7:04:10 PM	R30770
Surr: 4-Bromofluorobenzene	85.7	70-130		%REC	1	12/10/2015 7:04:10 PM	R30770
Surr: Dibromofluoromethane	87.8	70-130		%REC	1	12/10/2015 7:04:10 PM	R30770
Surr: Toluene-d8	103	70-130		%REC	1	12/10/2015 7:04:10 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-03-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 2:41:00 PM
Lab ID: 1512261-012
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	1.3	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Toluene	16	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Acetone	15	10		µg/L	1	12/10/2015 7:33:00 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
2-Butanone	98	10		µg/L	1	12/10/2015 7:33:00 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 7:33:00 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 7:33:00 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-03-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 2:41:00 PM
Lab ID: 1512261-012
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 7:33:00 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 7:33:00 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 7:33:00 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 7:33:00 PM	R30770
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	12/10/2015 7:33:00 PM	R30770
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	12/10/2015 7:33:00 PM	R30770
Surr: Dibromofluoromethane	84.5	70-130		%REC	1	12/10/2015 7:33:00 PM	R30770
Surr: Toluene-d8	104	70-130		%REC	1	12/10/2015 7:33:00 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-06-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 3:13:00 PM
Lab ID: 1512261-013
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	2.3	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Toluene	25	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Acetone	20	10		µg/L	1	12/10/2015 8:01:46 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 8:01:46 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 8:01:46 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 8:01:46 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW03-06-151130
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 11/30/2015 3:13:00 PM
Lab ID: 1512261-013
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 8:01:46 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 8:01:46 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 8:01:46 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 8:01:46 PM	R30770
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	1	12/10/2015 8:01:46 PM	R30770
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	1	12/10/2015 8:01:46 PM	R30770
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	12/10/2015 8:01:46 PM	R30770
Surr: Toluene-d8	119	70-130		%REC	1	12/10/2015 8:01:46 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-01-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:10:00 PM
Lab ID: 1512261-014
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Toluene	1.9	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Acetone	16	10		µg/L	1	12/10/2015 8:30:26 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 8:30:26 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 8:30:26 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 8:30:26 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-01-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:10:00 PM
Lab ID: 1512261-014
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 8:30:26 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 8:30:26 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Tetrachloroethene (PCE)	3.8	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 8:30:26 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 8:30:26 PM	R30770
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%REC	1	12/10/2015 8:30:26 PM	R30770
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	12/10/2015 8:30:26 PM	R30770
Surr: Dibromofluoromethane	91.3	70-130		%REC	1	12/10/2015 8:30:26 PM	R30770
Surr: Toluene-d8	96.3	70-130		%REC	1	12/10/2015 8:30:26 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-02-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:32:00 PM
Lab ID: 1512261-015
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Toluene	4.5	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Acetone	16	10		µg/L	1	12/10/2015 8:59:15 PM	R30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
2-Butanone	ND	10		µg/L	1	12/10/2015 8:59:15 PM	R30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 8:59:15 PM	R30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 8:59:15 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-02-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:32:00 PM
Lab ID: 1512261-015
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 8:59:15 PM	R30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 8:59:15 PM	R30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Styrene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 8:59:15 PM	R30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 8:59:15 PM	R30770
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	12/10/2015 8:59:15 PM	R30770
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	12/10/2015 8:59:15 PM	R30770
Surr: Dibromofluoromethane	100	70-130		%REC	1	12/10/2015 8:59:15 PM	R30770
Surr: Toluene-d8	113	70-130		%REC	1	12/10/2015 8:59:15 PM	R30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-03-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:11:00 PM
Lab ID: 1512261-016
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	1.6	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Toluene	5.6	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Acetone	ND	10		µg/L	1	12/10/2015 11:23:24 PM	A30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
2-Butanone	ND	10		µg/L	1	12/10/2015 11:23:24 PM	A30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 11:23:24 PM	A30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 11:23:24 PM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-03-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:11:00 PM
Lab ID: 1512261-016
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 11:23:24 PM	A30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 11:23:24 PM	A30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Styrene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Tetrachloroethene (PCE)	1.6	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 11:23:24 PM	A30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 11:23:24 PM	A30770
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	1	12/10/2015 11:23:24 PM	A30770
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	1	12/10/2015 11:23:24 PM	A30770
Surr: Dibromofluoromethane	89.5	70-130		%REC	1	12/10/2015 11:23:24 PM	A30770
Surr: Toluene-d8	103	70-130		%REC	1	12/10/2015 11:23:24 PM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-04-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:12:00 PM
Lab ID: 1512261-017
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	1.2	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Toluene	3.4	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Ethylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Naphthalene	ND	2.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Acetone	ND	10		µg/L	1	12/10/2015 11:52:11 PM	A30770
Bromobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Bromoform	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Bromomethane	ND	3.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
2-Butanone	ND	10		µg/L	1	12/10/2015 11:52:11 PM	A30770
Carbon disulfide	ND	10		µg/L	1	12/10/2015 11:52:11 PM	A30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Chlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Chloroethane	ND	2.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Chloroform	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Chloromethane	ND	3.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Dibromomethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2015 11:52:11 PM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-04-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:12:00 PM
Lab ID: 1512261-017
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
2-Hexanone	ND	10		µg/L	1	12/10/2015 11:52:11 PM	A30770
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2015 11:52:11 PM	A30770
Methylene Chloride	ND	3.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Styrene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Vinyl chloride	ND	1.0		µg/L	1	12/10/2015 11:52:11 PM	A30770
Xylenes, Total	ND	1.5		µg/L	1	12/10/2015 11:52:11 PM	A30770
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%REC	1	12/10/2015 11:52:11 PM	A30770
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1	12/10/2015 11:52:11 PM	A30770
Surr: Dibromofluoromethane	101	70-130		%REC	1	12/10/2015 11:52:11 PM	A30770
Surr: Toluene-d8	88.2	70-130		%REC	1	12/10/2015 11:52:11 PM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-05-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:21:00 PM
Lab ID: 1512261-018
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Toluene	3.8	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Ethylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Naphthalene	ND	2.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Acetone	ND	10		µg/L	1	12/11/2015 12:21:00 AM	A30770
Bromobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Bromodichloromethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Bromoform	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Bromomethane	ND	3.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
2-Butanone	ND	10		µg/L	1	12/11/2015 12:21:00 AM	A30770
Carbon disulfide	ND	10		µg/L	1	12/11/2015 12:21:00 AM	A30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Chlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Chloroethane	ND	2.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Chloroform	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Chloromethane	ND	3.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Dibromochloromethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Dibromomethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/11/2015 12:21:00 AM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-05-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:21:00 PM
Lab ID: 1512261-018
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
2-Hexanone	ND	10		µg/L	1	12/11/2015 12:21:00 AM	A30770
Isopropylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/11/2015 12:21:00 AM	A30770
Methylene Chloride	ND	3.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
n-Butylbenzene	ND	3.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
n-Propylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Styrene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Vinyl chloride	ND	1.0		µg/L	1	12/11/2015 12:21:00 AM	A30770
Xylenes, Total	ND	1.5		µg/L	1	12/11/2015 12:21:00 AM	A30770
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	1	12/11/2015 12:21:00 AM	A30770
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	1	12/11/2015 12:21:00 AM	A30770
Surr: Dibromofluoromethane	93.9	70-130		%REC	1	12/11/2015 12:21:00 AM	A30770
Surr: Toluene-d8	98.8	70-130		%REC	1	12/11/2015 12:21:00 AM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-06-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:22:00 PM
Lab ID: 1512261-019
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Toluene	2.8	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Ethylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Naphthalene	ND	2.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Acetone	ND	10		µg/L	1	12/11/2015 12:49:44 AM	A30770
Bromobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Bromodichloromethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Bromoform	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Bromomethane	ND	3.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
2-Butanone	ND	10		µg/L	1	12/11/2015 12:49:44 AM	A30770
Carbon disulfide	ND	10		µg/L	1	12/11/2015 12:49:44 AM	A30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Chlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Chloroethane	ND	2.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Chloroform	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Chloromethane	ND	3.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Dibromochloromethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Dibromomethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/11/2015 12:49:44 AM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-06-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:22:00 PM
Lab ID: 1512261-019
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
2-Hexanone	ND	10		µg/L	1	12/11/2015 12:49:44 AM	A30770
Isopropylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/11/2015 12:49:44 AM	A30770
Methylene Chloride	ND	3.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
n-Butylbenzene	ND	3.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
n-Propylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Styrene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Tetrachloroethene (PCE)	2.4	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Vinyl chloride	ND	1.0		µg/L	1	12/11/2015 12:49:44 AM	A30770
Xylenes, Total	ND	1.5		µg/L	1	12/11/2015 12:49:44 AM	A30770
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	12/11/2015 12:49:44 AM	A30770
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	12/11/2015 12:49:44 AM	A30770
Surr: Dibromofluoromethane	102	70-130		%REC	1	12/11/2015 12:49:44 AM	A30770
Surr: Toluene-d8	103	70-130		%REC	1	12/11/2015 12:49:44 AM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-07-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:23:00 PM
Lab ID: 1512261-020
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	1.5	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Toluene	4.0	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Ethylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Naphthalene	ND	2.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1-Methylnaphthalene	ND	4.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
2-Methylnaphthalene	ND	4.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Acetone	ND	10		µg/L	1	12/11/2015 2:16:21 AM	A30770
Bromobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Bromodichloromethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Bromoform	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Bromomethane	ND	3.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
2-Butanone	ND	10		µg/L	1	12/11/2015 2:16:21 AM	A30770
Carbon disulfide	ND	10		µg/L	1	12/11/2015 2:16:21 AM	A30770
Carbon Tetrachloride	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Chlorobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Chloroethane	ND	2.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Chloroform	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Chloromethane	ND	3.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
2-Chlorotoluene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
4-Chlorotoluene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
cis-1,2-DCE	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Dibromochloromethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Dibromomethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,1-Dichloroethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,1-Dichloroethene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2-Dichloropropane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,3-Dichloropropane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
2,2-Dichloropropane	ND	2.0		µg/L	1	12/11/2015 2:16:21 AM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: GWMW01-07-151201
Project: Griggs/Walnut GW (JSP) Ground H2O
Collection Date: 12/1/2015 12:23:00 PM
Lab ID: 1512261-020
Matrix: AQUEOUS
Received Date: 12/5/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Hexachlorobutadiene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
2-Hexanone	ND	10		µg/L	1	12/11/2015 2:16:21 AM	A30770
Isopropylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
4-Isopropyltoluene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
4-Methyl-2-pentanone	ND	10		µg/L	1	12/11/2015 2:16:21 AM	A30770
Methylene Chloride	ND	3.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
n-Butylbenzene	ND	3.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
n-Propylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
sec-Butylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Styrene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
tert-Butylbenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
trans-1,2-DCE	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Trichlorofluoromethane	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Vinyl chloride	ND	1.0		µg/L	1	12/11/2015 2:16:21 AM	A30770
Xylenes, Total	ND	1.5		µg/L	1	12/11/2015 2:16:21 AM	A30770
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	12/11/2015 2:16:21 AM	A30770
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	12/11/2015 2:16:21 AM	A30770
Surr: Dibromofluoromethane	106	70-130		%REC	1	12/11/2015 2:16:21 AM	A30770
Surr: Toluene-d8	96.9	70-130		%REC	1	12/11/2015 2:16:21 AM	A30770

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512261**
14-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW (JSP) Ground H2O Monitori

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30770** RunNo: **30770**
Prep Date: Analysis Date: **12/10/2015** SeqNo: **939923** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.7	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	20	1.0	20.00	0	99.6	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	93.0	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.7	70	130			
Surr: Toluene-d8	9.6		10.00		96.2	70	130			

Sample ID **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30770** RunNo: **30770**
Prep Date: Analysis Date: **12/10/2015** SeqNo: **939927** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512261**
14-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW (JSP) Ground H2O Monitori

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30770**	RunNo: **30770**			
Prep Date:	Analysis Date: **12/10/2015**	SeqNo: **939927**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512261**
14-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW (JSP) Ground H2O Monitori

Sample ID **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30770** RunNo: **30770**
Prep Date: Analysis Date: **12/10/2015** SeqNo: **939927** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.2	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.5	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30770** RunNo: **30770**
Prep Date: Analysis Date: **12/10/2015** SeqNo: **939958** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.0	70	130			
Toluene	23	1.0	20.00	0	113	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	83.9	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.5	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	11		10.00		114	70	130			

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A30770** RunNo: **30770**
Prep Date: Analysis Date: **12/10/2015** SeqNo: **939959** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512261**
14-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW (JSP) Ground H2O Monitori

Sample ID **rb3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **A30770**	RunNo: **30770**			
Prep Date:	Analysis Date: **12/10/2015**	SeqNo: **939959**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512261**
14-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW (JSP) Ground H2O Monitori

Sample ID **rb3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A30770** RunNo: **30770**
Prep Date: Analysis Date: **12/10/2015** SeqNo: **939959** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		109	70	130			

Sample ID **1512261-019ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **GWMW01-06-15120** Batch ID: **A30770** RunNo: **30770**
Prep Date: Analysis Date: **12/11/2015** SeqNo: **939964** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.9474	97.7	70	130			
Toluene	24	1.0	20.00	2.820	103	70	130			
Chlorobenzene	19	1.0	20.00	0	93.0	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	83.0	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0.6190	104	70	130			
Surr: 1,2-Dichloroethane-d4	12		10.00		120	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.1	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **1512261-019amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **GWMW01-06-15120** Batch ID: **A30770** RunNo: **30770**
Prep Date: Analysis Date: **12/11/2015** SeqNo: **939965** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0.9474	86.3	70	130	11.8	20	
Toluene	23	1.0	20.00	2.820	103	70	130	0.667	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512261**
14-Dec-15

Client: City of Las Cruces
Project: Griggs/Walnut GW (JSP) Ground H2O Monitori

Sample ID **1512261-019amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **GWMW01-06-15120** Batch ID: **A30770** RunNo: **30770**
Prep Date: Analysis Date: **12/11/2015** SeqNo: **939965** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	18	1.0	20.00	0	88.7	70	130	4.76	20	
1,1-Dichloroethene	15	1.0	20.00	0	73.5	70	130	12.1	20	
Trichloroethene (TCE)	19	1.0	20.00	0.6190	92.8	70	130	11.3	20	
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.8		10.00		98.3	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		113	70	130	0	0	
Surr: Toluene-d8	11		10.00		112	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1512261 CS 12/07/15 RcptNo: 1

Received by/date: LM 12/05/15

Logged By: Celina Sessa 12/5/2015 9:30:00 AM Celina Sessa

Completed By: Celina Sessa 12/7/2015 9:16:50 AM Celina Sessa

Reviewed By: 12/07/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000
Las Cruces NM 88004

Phone #: 575-528-3604

Email or Fax#: 575-528-3630

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: 621665-WALNUT (US) Ground H2O Monitoring Wells

Project #: ~~621~~

Project Manager: Luis Guerra
lguerra@las-cruces.org
575-528-3609

Sampler: Laura Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

1 of 2

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1512261	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
2/15	9:50	Ground H2O	GWMW10-01-151202	3-40ml	HgCl2	-001										X						
			~~GWMW10-02-151202~~	~~Sem~~																		
			~~GWMW10-01-151202~~	~~Sem~~																		
	9:52	Ground H2O	GWMW10-02-151202	3-40ml	HgCl2	-002										X						
	9:54		GWMW10-03-151202	3-40ml		-003										X						
	1007		GWMW10-04-151202	3-40ml		-004										X						
	1008		GWMW10-05-151202	3-40ml		-005										X						
	1017		GWMW10-06-151202	3-40ml		-006										X						
02/15	1018	Ground H2O	GWMW10-07-151202	3-40ml	HgCl2	-007										X						
3/15	1402	Ground H2O	GWMW-16D-151203	3-40ml	HgCl2	-008										X						
4/15	1332	Ground H2O	GWMW-16S-151204	3-40ml	HgCl2	-009										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/15	1445	Laura Montoya		12/05/15	0950
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra
Send invoice to CLC C/O LGUERRA

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: City of Las Cruces

Mailing Address: P.O. Box 20000 Las Cruces, NM 88004

Phone #: 575-528-3604

Email or Fax#: 575-528-3630

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☒ NELAP ☐ Other

☐ EDD (Type) EXCELL

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: GR1665-WALNUT (JSP) Ground H2O Monitoring Wells

Project #:

Project Manager: Luis Guerra lguerra@las-cruces.org 575-528-3609

Sampler: Layna Montoya

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

2 of 2

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1512261	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
30/15	1435	Ground H2O	GWMW03-01-151130	3-40ml	HgCl2	-010										X						
30/15	1438		GWMW03-02-151130	3-40ml	HgCl2	-011										X						
30/15	1441		GWMW03-03-151130	3-40ml	HgCl2	-012										X						
30/15	1513	Ground H2O	GWMW03-06-151130	3-40ml	HgCl2	-013										X						
01/15	12:10	Ground H2O	GWMW01-01-151201	3-40ml	HgCl2	-014										X						
01/15	12:32		GWMW01-02-151201	3-40ml	HgCl2	-015										X						
01/15	12:11		GWMW01-03-151201	3-40ml	HgCl2	-016										X						
01/15	12:12		GWMW01-04-151201	3-40ml	HgCl2	-017										X						
01/15	12:21		GWMW01-05-151201	3-40ml	HgCl2	-018										X						
01/15	12:22		GWMW01-06-151201	3-40ml	HgCl2	-019										X						
01/15	12:23	Ground H2O	GWMW01-07-151201	3-40ml	HgCl2	-020										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/15	1445	Layna Montoya		12/05/15	0930
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send Results to Luis Guerra

Send invoice to CLC % Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 17, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund (JSP) Process Center Monthly Samples OrderNo.: 1512747

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 8 sample(s) on 12/16/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:11:00 AM
Lab ID: 1512747-001
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 1:55:43 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Bromodichloromethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Bromoform	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 1:55:43 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 1:55:43 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Chloroform	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Dibromochloromethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 1:55:43 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC27_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:11:00 AM
Lab ID: 1512747-001
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 1:55:43 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 1:55:43 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Tetrachloroethene (PCE)	13	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 1:55:43 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 1:55:43 AM	R30895
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	12/17/2015 1:55:43 AM	R30895
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	12/17/2015 1:55:43 AM	R30895
Surr: Dibromofluoromethane	107	70-130		%REC	1	12/17/2015 1:55:43 AM	R30895
Surr: Toluene-d8	105	70-130		%REC	1	12/17/2015 1:55:43 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:22:00 AM
Lab ID: 1512747-002
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 2:24:35 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Bromodichloromethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Bromoform	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 2:24:35 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 2:24:35 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Chloroform	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Dibromochloromethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 2:24:35 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: CLC18_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:22:00 AM
Lab ID: 1512747-002
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 2:24:35 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 2:24:35 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Tetrachloroethene (PCE)	19	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 2:24:35 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 2:24:35 AM	R30895
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	12/17/2015 2:24:35 AM	R30895
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	1	12/17/2015 2:24:35 AM	R30895
Surr: Dibromofluoromethane	111	70-130		%REC	1	12/17/2015 2:24:35 AM	R30895
Surr: Toluene-d8	101	70-130		%REC	1	12/17/2015 2:24:35 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:52:00 AM
Lab ID: 1512747-003
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 2:53:18 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Bromodichloromethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Bromoform	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 2:53:18 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 2:53:18 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Chloroform	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Dibromochloromethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 2:53:18 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: IS1_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:52:00 AM
Lab ID: 1512747-003
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 2:53:18 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 2:53:18 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Tetrachloroethene (PCE)	11	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 2:53:18 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 2:53:18 AM	R30895
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	12/17/2015 2:53:18 AM	R30895
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	1	12/17/2015 2:53:18 AM	R30895
Surr: Dibromofluoromethane	100	70-130		%REC	1	12/17/2015 2:53:18 AM	R30895
Surr: Toluene-d8	102	70-130		%REC	1	12/17/2015 2:53:18 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:55:00 AM
Lab ID: 1512747-004
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 3:22:00 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Bromodichloromethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Bromoform	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 3:22:00 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 3:22:00 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Chloroform	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Dibromochloromethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 3:22:00 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C1_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:55:00 AM
Lab ID: 1512747-004
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 3:22:00 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 3:22:00 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 3:22:00 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 3:22:00 AM	R30895
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	12/17/2015 3:22:00 AM	R30895
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	12/17/2015 3:22:00 AM	R30895
Surr: Dibromofluoromethane	100	70-130		%REC	1	12/17/2015 3:22:00 AM	R30895
Surr: Toluene-d8	101	70-130		%REC	1	12/17/2015 3:22:00 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:57:00 AM
Lab ID: 1512747-005
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 3:50:41 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Bromodichloromethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Bromoform	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 3:50:41 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 3:50:41 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Chloroform	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Dibromochloromethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 3:50:41 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: C2_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 9:57:00 AM
Lab ID: 1512747-005
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 3:50:41 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 3:50:41 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 3:50:41 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 3:50:41 AM	R30895
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	12/17/2015 3:50:41 AM	R30895
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	12/17/2015 3:50:41 AM	R30895
Surr: Dibromofluoromethane	104	70-130		%REC	1	12/17/2015 3:50:41 AM	R30895
Surr: Toluene-d8	104	70-130		%REC	1	12/17/2015 3:50:41 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 10:00:00 AM
Lab ID: 1512747-006
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 4:19:29 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Bromodichloromethane	3.8	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Bromoform	3.3	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 4:19:29 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 4:19:29 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Chloroform	2.4	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Dibromochloromethane	4.8	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 4:19:29 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151215
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 10:00:00 AM
Lab ID: 1512747-006
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 4:19:29 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 4:19:29 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 4:19:29 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 4:19:29 AM	R30895
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	12/17/2015 4:19:29 AM	R30895
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	12/17/2015 4:19:29 AM	R30895
Surr: Dibromofluoromethane	108	70-130		%REC	1	12/17/2015 4:19:29 AM	R30895
Surr: Toluene-d8	99.8	70-130		%REC	1	12/17/2015 4:19:29 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151215DUPE
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 10:00:00 AM
Lab ID: 1512747-007
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 4:48:23 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Bromodichloromethane	4.6	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Bromoform	2.9	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 4:48:23 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 4:48:23 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Chloroform	3.5	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Dibromochloromethane	5.3	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 4:48:23 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: ES1_151215DUPE
Project: Joint Superfund (JSP) Process Center Mo
Collection Date: 12/15/2015 10:00:00 AM
Lab ID: 1512747-007
Matrix: AQUEOUS
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 4:48:23 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 4:48:23 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 4:48:23 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 4:48:23 AM	R30895
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	12/17/2015 4:48:23 AM	R30895
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	12/17/2015 4:48:23 AM	R30895
Surr: Dibromofluoromethane	106	70-130		%REC	1	12/17/2015 4:48:23 AM	R30895
Surr: Toluene-d8	99.6	70-130		%REC	1	12/17/2015 4:48:23 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund (JSP) Process Center Mo
Collection Date:
Lab ID: 1512747-008
Matrix: TRIP BLANK
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Toluene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Ethylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Naphthalene	ND	2.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
2-Methylnaphthalene	ND	4.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Acetone	ND	10		µg/L	1	12/17/2015 5:45:37 AM	R30895
Bromobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Bromodichloromethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Bromoform	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Bromomethane	ND	3.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
2-Butanone	ND	10		µg/L	1	12/17/2015 5:45:37 AM	R30895
Carbon disulfide	ND	10		µg/L	1	12/17/2015 5:45:37 AM	R30895
Carbon Tetrachloride	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Chlorobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Chloroethane	ND	2.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Chloroform	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Chloromethane	ND	3.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
2-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
4-Chlorotoluene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
cis-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Dibromochloromethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Dibromomethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,1-Dichloroethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,1-Dichloroethene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,3-Dichloropropane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
2,2-Dichloropropane	ND	2.0		µg/L	1	12/17/2015 5:45:37 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: TRIP BLANK
Project: Joint Superfund (JSP) Process Center Mo
Collection Date:
Lab ID: 1512747-008
Matrix: TRIP BLANK
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Hexachlorobutadiene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
2-Hexanone	ND	10		µg/L	1	12/17/2015 5:45:37 AM	R30895
Isopropylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
4-Isopropyltoluene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
4-Methyl-2-pentanone	ND	10		µg/L	1	12/17/2015 5:45:37 AM	R30895
Methylene Chloride	ND	3.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
n-Butylbenzene	ND	3.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
n-Propylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
sec-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Styrene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
tert-Butylbenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
trans-1,2-DCE	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Trichlorofluoromethane	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Vinyl chloride	ND	1.0		µg/L	1	12/17/2015 5:45:37 AM	R30895
Xylenes, Total	ND	1.5		µg/L	1	12/17/2015 5:45:37 AM	R30895
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	12/17/2015 5:45:37 AM	R30895
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	12/17/2015 5:45:37 AM	R30895
Surr: Dibromofluoromethane	110	70-130		%REC	1	12/17/2015 5:45:37 AM	R30895
Surr: Toluene-d8	102	70-130		%REC	1	12/17/2015 5:45:37 AM	R30895

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512747**
17-Dec-15

Client: City of Las Cruces
Project: Joint Superfund (JSP) Process Center Monthly S

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R30895** RunNo: **30895**
Prep Date: Analysis Date: **12/16/2015** SeqNo: **944467** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R30895** RunNo: **30895**
Prep Date: Analysis Date: **12/16/2015** SeqNo: **944468** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512747**
17-Dec-15

Client: City of Las Cruces
Project: Joint Superfund (JSP) Process Center Monthly S

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **PBW**	Batch ID: **R30895**	RunNo: **30895**					
Prep Date:	Analysis Date: **12/16/2015**	SeqNo: **944468**	Units: **µg/L**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1512747**
17-Dec-15

Client: City of Las Cruces
Project: Joint Superfund (JSP) Process Center Monthly S

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R30895**	RunNo: **30895**			
Prep Date:	Analysis Date: **12/16/2015**	SeqNo: **944468**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.4	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1512747 RcptNo: 1

Received by/date: JA 12/16/15

Logged By: Ashley Gallegos 12/16/2015 9:30:00 AM

Completed By: Ashley Gallegos 12/16/2015 10:52:48 AM

Reviewed By: IO 12/16/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces WATER QUALITY LAB
Mailing Address: P.O. Box 20000 Las Cruces, NM 88004
Phone #: 575-528-3604
email or Fax#: 575-528-3630
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: JOINT Superfund (JSP) Process Center - Monthly Samples
Project #: CLC-JSP "GRIGGS-WALNUT"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1512747	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
12/15/15	9:11	Drink H_2O	CLC27-151215	3-40ml	$HgCl_2$	-001										X						
	9:22		CLC18-151215	3-40ml	$HgCl_2$	-002										X						
	9:52		IS1-151215	3-40ml	$HgCl_2$	-003										X						
	9:55		C1-151215	3-40ml	$HgCl_2$	-004										X						
	9:57		C2-151215	3-40ml	$HgCl_2$	-005										X						
	10:00		ES1-151215	3-40ml	$HgCl_2$	-006										X						
12/15/15	10:02	Drink H_2O	ES1-151215 DUPE	3-40ml	$HgCl_2$	-007										X						
12/15/15	unk	Lab H_2O	TRIP BLANK	2-40ml	$HgCl_2$	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/15/15	1400	Laura Montoya	[illegible]	12/16/15	0930
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Send results to Luis Guerra
Send invoice to CLC % Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 21, 2015

Luis Guerra
City of Las Cruces
PO Box 20000
Las Cruces, NM 88004
TEL: (575) 528-3604
FAX

RE: Joint Superfund (JSP) Process Center-Monthly Samples OrderNo.: 1512749

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 12/16/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1512749**
Date Reported: **12/21/2015**

CLIENT: City of Las Cruces
Client Sample ID: AS1_151215
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 12/15/2015 10:07:00 AM
Lab ID: 1512749-001
Matrix: AIR
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Toluene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Ethylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Naphthalene	ND	0.20		µg/L	1	12/18/2015 1:44:55 PM	R30969
1-Methylnaphthalene	ND	0.40		µg/L	1	12/18/2015 1:44:55 PM	R30969
2-Methylnaphthalene	ND	0.40		µg/L	1	12/18/2015 1:44:55 PM	R30969
Acetone	ND	1.0		µg/L	1	12/18/2015 1:44:55 PM	R30969
Bromobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Bromodichloromethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Bromoform	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Bromomethane	ND	0.20		µg/L	1	12/18/2015 1:44:55 PM	R30969
2-Butanone	ND	1.0		µg/L	1	12/18/2015 1:44:55 PM	R30969
Carbon disulfide	ND	1.0		µg/L	1	12/18/2015 1:44:55 PM	R30969
Carbon tetrachloride	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Chlorobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Chloroethane	ND	0.20		µg/L	1	12/18/2015 1:44:55 PM	R30969
Chloroform	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Chloromethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
2-Chlorotoluene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
4-Chlorotoluene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
cis-1,2-DCE	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/18/2015 1:44:55 PM	R30969
Dibromochloromethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Dibromomethane	ND	0.20		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,1-Dichloroethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,1-Dichloroethene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2-Dichloropropane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,3-Dichloropropane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
2,2-Dichloropropane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS1_151215
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 12/15/2015 10:07:00 AM
Lab ID: 1512749-001
Matrix: AIR
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Hexachlorobutadiene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
2-Hexanone	ND	1.0		µg/L	1	12/18/2015 1:44:55 PM	R30969
Isopropylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
4-Isopropyltoluene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/18/2015 1:44:55 PM	R30969
Methylene chloride	ND	0.30		µg/L	1	12/18/2015 1:44:55 PM	R30969
n-Butylbenzene	ND	0.30		µg/L	1	12/18/2015 1:44:55 PM	R30969
n-Propylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
sec-Butylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Styrene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
tert-Butylbenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
trans-1,2-DCE	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Trichlorofluoromethane	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/18/2015 1:44:55 PM	R30969
Vinyl chloride	ND	0.10		µg/L	1	12/18/2015 1:44:55 PM	R30969
Xylenes, Total	ND	0.15		µg/L	1	12/18/2015 1:44:55 PM	R30969
Surr: Dibromofluoromethane	105	70-130		%REC	1	12/18/2015 1:44:55 PM	R30969
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	12/18/2015 1:44:55 PM	R30969
Surr: Toluene-d8	95.3	70-130		%REC	1	12/18/2015 1:44:55 PM	R30969
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1	12/18/2015 1:44:55 PM	R30969

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces
Client Sample ID: AS2_151215
Project: Joint Superfund (JSP) Process Center-Mo
Collection Date: 12/15/2015 10:13:00 AM
Lab ID: 1512749-002
Matrix: AIR
Received Date: 12/16/2015 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Toluene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Ethylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Naphthalene	ND	0.20		µg/L	1	12/18/2015 2:13:37 PM	R30969
1-Methylnaphthalene	ND	0.40		µg/L	1	12/18/2015 2:13:37 PM	R30969
2-Methylnaphthalene	ND	0.40		µg/L	1	12/18/2015 2:13:37 PM	R30969
Acetone	ND	1.0		µg/L	1	12/18/2015 2:13:37 PM	R30969
Bromobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Bromodichloromethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Bromoform	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Bromomethane	ND	0.20		µg/L	1	12/18/2015 2:13:37 PM	R30969
2-Butanone	ND	1.0		µg/L	1	12/18/2015 2:13:37 PM	R30969
Carbon disulfide	ND	1.0		µg/L	1	12/18/2015 2:13:37 PM	R30969
Carbon tetrachloride	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Chlorobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Chloroethane	ND	0.20		µg/L	1	12/18/2015 2:13:37 PM	R30969
Chloroform	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Chloromethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
2-Chlorotoluene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
4-Chlorotoluene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
cis-1,2-DCE	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/18/2015 2:13:37 PM	R30969
Dibromochloromethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Dibromomethane	ND	0.20		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,1-Dichloroethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,1-Dichloroethene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2-Dichloropropane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,3-Dichloropropane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
2,2-Dichloropropane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

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Matrix: AIR
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Hexachlorobutadiene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
2-Hexanone	ND	1.0		µg/L	1	12/18/2015 2:13:37 PM	R30969
Isopropylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
4-Isopropyltoluene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/18/2015 2:13:37 PM	R30969
Methylene chloride	ND	0.30		µg/L	1	12/18/2015 2:13:37 PM	R30969
n-Butylbenzene	ND	0.30		µg/L	1	12/18/2015 2:13:37 PM	R30969
n-Propylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
sec-Butylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Styrene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
tert-Butylbenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
trans-1,2-DCE	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Trichlorofluoromethane	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/18/2015 2:13:37 PM	R30969
Vinyl chloride	ND	0.10		µg/L	1	12/18/2015 2:13:37 PM	R30969
Xylenes, Total	ND	0.15		µg/L	1	12/18/2015 2:13:37 PM	R30969
Surr: Dibromofluoromethane	101	70-130		%REC	1	12/18/2015 2:13:37 PM	R30969
Surr: 1,2-Dichloroethane-d4	82.0	70-130		%REC	1	12/18/2015 2:13:37 PM	R30969
Surr: Toluene-d8	99.0	70-130		%REC	1	12/18/2015 2:13:37 PM	R30969
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	1	12/18/2015 2:13:37 PM	R30969

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces Work Order Number: 1512749 RcptNo: 1

Received by/date: 12/16/15

Logged By: Ashley Gallegos 12/16/2015 9:30:00 AM

Completed By: Ashley Gallegos 12/16/2015 11:03:36 AM

Reviewed By: 12/16/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
WATER QUALITY LAB
Mailing Address: P.O. Box 20000
Las Cruces, NM 88004
Phone #: 575-528-3604
Email or Fax#: 575-528-3630
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCELL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: Joint Superfund (JSP) Process Center Monthly Samples
Project #: CLC-JSP "GRIGGS-WALNUT"
Project Manager: Luis Guerra 575-528-3609 lguerra@las-cruces.org
Sampler: Laura Montoya
On Ice: ☐ Yes ☒ No
Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1512747	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~) VOC	8270 (Semi-VOA)					Air Bubbles (Y or N)
5/15	1007	AIR	AS1-151215	1-TEDLAR BAG	NONE	-001										X						
5/15	1013	AIR	AS2-151215	1-TEDLAR BAG	NONE	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/15	1400	Laura Montoya	[signature]	12/16/15	0930

Remarks: Send Results to Luis Guerra
Send invoice to CLC c/o Luis Guerra

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix B

JSAI Report

ASSESSMENT OF THE GRIGGS AND WALNUT PCE PLUME AND CAPTURE WELLS 2013 THROUGH 2015

prepared by

Steven T. Finch, Jr., CPG

Annie McCoy, CPG

JOHN SHOMAKER & ASSOCIATES, INC.
Water-Resource and Environmental Consultants
2611 Broadbent Parkway NE
Albuquerque, New Mexico 87107
505-345-3407
www.shomaker.com

prepared for

DBS&A
Albuquerque, New Mexico
and
Las Cruces Utilities
City of Las Cruces

April 4, 2016

ASSESSMENT OF THE GRIGGS AND WALNUT PCE PLUME AND CAPTURE WELLS 2013 THROUGH 2015

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ASSESSMENT OF THE GRIGGS AND WALNUT PCE PLUME AND CAPTURE WELLS 2013 THROUGH 2015

EXECUTIVE SUMMARY

The last several years of Griggs and Walnut capture pumping and data collection have provided evidence that the plume is decreasing in mass and remedial progress is being made. The capture efficiency issue with Well 18 has been investigated and resolved, and capture Wells 18 and 27 pumping rates and schedules are optimized.

Results from monitoring well GWMW16(S,D) installation during August 2015 have helped refine the Conceptual Site Model and PCE plume extent in the Upper and Lower Hydrogeologic Zones. The clay layer separating the Upper from the Lower Hydrogeologic Zone is bowl shaped. The Upper Hydrogeologic Zone PCE plume is mostly contained by the bowl shape configuration of the clay layer. Well 18 is located in the low point of the clay layer, which allows for efficient capture from the PCE plume in the Upper Hydrogeologic Zone underlain by the clay layer. The Upper Hydrogeologic Zone PCE plume and the Lower Hydrogeologic Zone PCE plume appear to be connected in a localized area between GWMW16(S,D) and MW-SF10 where the clay pinches out to the east or northeast.

Revisions to the estimation of PCE mass in groundwater are based on the plume extent in the Upper and Lower Hydrogeologic Zones (see Figs. 8 and 9; Table 3). The revised estimated total PCE mass in groundwater is 29.5 kg, and the potential removal rate from Wells 18 and 27 combined is 5.84 kg/year, provided PCE concentrations at Wells 18 and 27 remain the same as those observed in 2015.

Well 18 captures the PCE in the Upper Hydrogeologic Zone where the underlying clay layer is present. Well 27 captures the PCE plume from the Upper Hydrogeologic Zone where the underlying clay layer is absent and from the Lower Hydrogeologic Zone.

Results from the updated Griggs and Walnut groundwater-flow and solute-transport model indicate the pump and treat system is performing better than expected for the first 3 years of operation; this maybe largely in part to the revised understanding of the PCE plume distribution and mass, and optimization of Wells 18 and 27. However, mass removal rates are expected to decrease as the PCE plume reduces in size and non-impacted groundwater is captured.

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(follow text)

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Figure 3. Hydrogeologic cross-section A-A' with November 2015 PCE concentrations, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 4. Hydrogeologic cross-section B-B' with November 2015 PCE concentrations, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 5. Aerial photograph showing December 2015 water-level elevation contours for the City of Las Cruces area.

Figure 6. Aerial photograph showing November 2015 water level elevation contours for the Upper Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 7. Aerial photograph showing November 2015 water level elevation contours for the Lower Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 8. Aerial photograph showing November 2015 PCE concentrations and groundwater-elevation contours for the Upper Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 9. Aerial photograph showing November 2015 PCE concentrations and groundwater-elevation contours for the Lower Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 10. Graph of model-simulated PCE concentrations for Well 18 in Layers 1, 2, and 3, with Well 27 pumping at 200 gpm and Well 18 pumping at 25 gpm, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 11. Graph of model-simulated PCE concentrations for Well 27 in Layers 2 and 3, with Well 27 pumping at 200 gpm and Well 18 pumping at 25 gpm, Griggs and Walnut site, City of Las Cruces, New Mexico.

APPENDICES

(follow illustrations)

Appendix A. Well completion diagram and lithologic logs for monitoring wells GWMW16(S,D)

Appendix B. Selected hydrographs from wells in the Griggs and Walnut plume area

Appendix C. Graphs showing observed and model simulated PCE concentrations

ASSESSMENT OF THE GRIGGS AND WALNUT PCE PLUME AND CAPTURE WELLS 2013 THROUGH 2016

1.0 INTRODUCTION

John Shomaker & Associates, Inc. (JSAI) was subcontracted by DBS&A to assist the Griggs and Walnut Joint Superfund Project (Doña Ana County and City of Las Cruces) with assessment of the Griggs and Walnut tetrachloroethene (PCE) plume and efficiency of the pump and treat system. The primary project goal was to evaluate remedial progress, where previous assessments focused on optimizing the plume capture wells. Site location map is presented as Figure 1.

1.1 Background

The Griggs and Walnut pump and treat system began during May 2012, and it has been operated near continuously. During the 4th quarter of 2012, Well 18 yielded lower-than-expected PCE concentrations, and Well 27 averaged better-than-expected PCE concentrations. PCE concentrations in water produced from Well 18 decreased from 70 micrograms per liter (µg/L) to 2.3 µg/L between April and December 2012. PCE concentrations in water from Well 27 have remained fairly constant at around 14 µg/L.

JSAI reviewed the daily meter readings and the PCE concentration trends from Wells 18 and 27, and performed diagnostic pumping tests on Well 18 (March 7, 2013). Results from the diagnostic pumping test performed on Well 18 indicate well performance has not significantly changed. It was determined that PCE concentrations from Well 18 are influenced by well hydraulics, pumping rate, and pumping schedule. Through testing it was identified that the higher PCE groundwater at Well 18 originated from the Upper Hydrogeologic Zone, which recharges the Lower Hydrogeologic Zone by downward flow through the gravel pack when Well 18 is not pumping. In the vicinity of Well 18, the PCE plume in the Upper Hydrogeologic Zone has a much higher specific conductance than the Lower Hydrogeologic Zone. The use of specific conductance measurements allowed the optimization of pumping schedule for Well 18 to maximize the capture of the PCE plume from the Upper Hydrogeologic Zone. It was also determined through testing, that the Lower Hydrogeologic Zone at Well 18 did not contain PCE concentrations greater than 5 µg/L: consistent with trends observed at nearby monitoring well GWMW01.

JSAI recommended refinement of the pumping from Well 18 by implementing daily pumping cycles followed by recovery. This cyclic pumping was determined to be more effective with capture of the PCE plume in the Upper Hydrogeologic Zone. At the same time, it was recommended to increase pumping from Well 27 to optimize PCE plume capture in the Lower Hydrogeologic Zone.

Little has been known about the characteristics of the PCE plume center between GWMW01, MW-SF10, and GWMW10. The drilling of GWMW16(S,D) in the projected plume center was accomplished during the 3rd quarter of 2015. Results from GWMW16(S,D) have helped refine the understanding of the PCE plume extent, and the configuration of the clay layer separating the Upper and Lower Hydrogeologic Zones; as discussed herein.

1.2 Scope of Work

The scope of work included the following tasks:

1. Evaluation of data collected from Wells 18 and 27, and the surrounding monitoring network.
2. Evaluation of PCE plume extent and determine how the PCE plume has responded to capture pumping. This task also includes calculation of PCE mass remaining in groundwater and PCE mass removed.
3. Incorporate the data collected into the Griggs and Walnut groundwater-flow and solute-transport model, and re-access plume capture and clean up duration.
4. Prepare a technical report describing and illustrating results.
5. Provide recommendations to improve monitoring, data collection, and operation of capture wells 18 and 27.

2.0 DATA SOURCES

Data sources used for this evaluation include operational data from the Griggs and Walnut plume treatment system, data collected from the monitoring well network, data collected during Well 18 optimization testing, and data from the City of Las Cruces water-level monitoring program.

2.1 GWMW16(S,D)

Monitoring well pair GWMW16(S,D) were drilled and constructed during the 3rd Quarter of 2015. The purpose of GWMW16(S,D) was to better characterize the projected PCE plume center, and to use the monitoring results for tracking remedial progress. Details regarding GWMW16(S,D) lithology and construction can be referenced from Appendix A.

GWMW16-S was constructed in the Upper Hydrogeologic Zone and GWMW16-D was constructed in the lower Hydrogeologic Zone. The results from drilling these two wells have been used to update the hydrogeologic Conceptual Site Model (see **Section 3.1**).

2.2 Wells 18 and 27 Operational Data

In 2010, Wells 18 and 27 were modified by performing partial plug back so pumping would occur from the upper screen section where the PCE plume resided without clean groundwater contributions from the lower screen section. Following modification, step-drawdown pumping tests and water-quality analyses were performed on Wells 18 and 27. Details can be referenced from JSAI (2009). Wells 18 and 27 PCE concentrations prior to and after partial plug back are shown on Figure 2.

Pumping duration and average-daily pumping rate varied as the treatment system was undergoing start up evaluation between May 2012 and August 2012. Since start up, water levels, metered diversions, and PCE concentration data have been collected from Wells 18 and 27. Specific conductance sensor was installed on the discharge line and the data were used to further evaluate the optimum pumping cycle for Well 18.

2.3 Griggs and Walnut Monitoring Network and Water Quality

The Griggs and Walnut JSP collected water-level and water-quality data from the monitoring well network during November and December 2015. Several of the monitoring wells in the vicinity of the County Yard were not accessible or had collapsed. Table 1 is a summary of monitoring well completion data. Well locations can be referenced from Figure 1.

December 2015 water-level data from the City of Las Cruces monitoring well network were used to assess regional water-level elevation contours and direction of groundwater flow. A summary of the December 2015 water-level data is presented as Table 2.

Table 1. Summary of well data and 2005 through 2015 PCE results for the Griggs and Walnut site monitoring network

sample location	northing (NMSP NAD 83, feet)	easting (NMSP NAD 83, feet)	elevation (ft amsl)	port ID	depth of screen interval (ft bgl)	type well	Hydrogeologic Zone (HZ) monitored	RI/FS 2005 PCE (µg/L)	remedial design 2009 PCE (µg/L)	system startup 2012 PCE (µg/L)	current 2015 PCE (µg/L)
CLC 18	479,040	1,483,111	4,044.00		315 - 516	capture	Upper HZ	**35**	**48**	**42**	**13**
CLC 20	477,573	1,486,695	4,072.00		380 - 673	supply	Lower HZ	---	---	2.3	<1.0
CLC 26	476,633	1,484,298	4,021.00		410 - 700	supply	Lower HZ	---	---	<1.0	<1.0
CLC 27	478,885	1,484,263	4,050.00		430 - 524	capture	Lower HZ	---	**11**	**5.8**	**14**
CLC 57	478,928	1,488,480	4,130.00		408 - 516	supply	Lower HZ	---	---	<1.0	<1.0
Paz Park	480,912	1,482,790	4,013.00		na	irrigation	Lower HZ	---	---	<1.0	<1.0
GWMW01	479,017.6	1,483,309.2	4,035.70	1	210 - 220	multi-port flute	Upper HZ	**5.3**	---	**5.8**	3.8
				2	270 - 280		Lower HZ	**21**	---	<1.0	<1.0
				3	330 - 340		Lower HZ	1	---	2.7	1.6
				4	420 - 430		Lower HZ	2	---	<1.0	<1.0
				5	460 - 470		Lower HZ	3.4	---	3.2	<1.0
				6	515 - 525		Lower HZ	**6.2**	---	**11**	2.4
				7	560 - 570		Lower HZ	2.1	---	3.2	<1.0
GWMW03	479,519.7	1,480,641.7	3,975.20	1	140 - 150	multi-port flute	Upper HZ	0.3	1.6	<1.0	<1.0
				2	225 - 235		Lower HZ	0.5	<1.0	<1.0	<1.0
				3	270 - 280		Lower HZ	<0.5	<1.0	<1.0	<1.0
				4	320 - 330		Lower HZ	<0.5	<1.0	<1.0	<1.0
				5	410 - 420		Lower HZ	---	<1.0	<1.0	<1.0
				6	460 - 470		Lower HZ	---	---	<1.0	<1.0
GWMW08	480,044.8	1,483,349.7	4,018.80	1	190 - 200	multi-port flute	Upper HZ	---	---	---	---
				2	255 - 265		Lower HZ	---	---	---	---
				3	305 - 315		Lower HZ	<0.5	---	<1.0	<1.0
				4	380 - 390		Lower HZ	<0.5	---	<1.0	<1.0
				5	430 - 440		Lower HZ	<0.5	---	<1.0	<1.0
				6	490 - 500		Lower HZ	<0.5	---	<1.0	<1.0
				7	535 - 545		Lower HZ	<0.5	---	<1.0	<1.0
GWMW09	480,413.5	1,485,066.6	4,049.90	1	240 - 250	multi-port flute	Upper HZ	0.6	<1.0	<1.0	<1.0
				2	295 - 305		Lower HZ	**19**	**13**	1.3	<1.0
				3	355 - 365		Lower HZ	**14**	**9**	<1.0	**5.1**
				4	410 - 420		Lower HZ	**16**	**29**	1.2	**11.0**
				5	480 - 490		Lower HZ	**18**	**20**	1.7	**16.0**
				6	550 - 560		Lower HZ	0.2	<1.0	<1.0	<1.0
				7	630 - 640		Lower HZ	<1.8	<1.0	<1.0	<1.0
GWMW10	479,228.8	1,484,919.3	4,063.40	1	250 - 260	multi-port flute	Upper HZ	3.2	**31**	**47**	1.2
				2	320 - 330		Lower HZ	**14**	**36**	**14**	4.4
				3	370 - 380		Lower HZ	**16**	**46**	**45**	1.8
				4	440 - 450		Lower HZ	**14**	**15**	4.5	1.2
				5	505 - 515		Lower HZ	0.2	<1.0	<1.0	<1.0
				6	560 - 570		Lower HZ	0.4	<1.0	<1.0	<1.0
				7	620 - 630		Lower HZ	0.2	<1.0	<1.0	4.2
GWMW11-S	477,982.1	1,483,180.7	4,021.46		190 - 205	conventional	Upper HZ	<0.5	<1.0	<1.0	<1.0
GWMW11-I	477,982.4	1,483,180.5	4,021.42		299 - 314	conventional	Lower HZ upper portion	<0.5	<1.0	<1.0	2.0
GWMW11-D	477,982.5	1,483,180.8	4,021.46		525 - 540	conventional	Lower HZ lower portion	<0.5	<1.0	<1.0	<1.0
GWMW15-S	480,920.0	1,486,661.6	4,079.84		289 - 304	conventional	Upper HZ	**18**	2.6	<1.0	<1.0
GWMW15-I	480,920.1	1,486,661.2	4,079.89		460 - 475	conventional	Lower HZ upper portion	<0.5	<1.0	2.6	**6.1**
GWMW15-D	480,919.9	1,486,661.2	4,079.85		581 - 596	conventional	Lower HZ lower portion	<0.5	<1.0	<1.0	<1.0
GWMW16-S	479,478	1,484,022	*4,036**		185 - 205	conventional	Upper HZ				1.6
GWMW16-D	479,473	1,484,003	*4,037**		350 - 370	conventional	Lower HZ upper portion				3.1
MW-1[c]	478,754.9	1,483,492.6	4,034.75		187 - 197	conventional	Upper HZ	0.2	---	<5.0	2.1
MW-3[c]	478,919.2	1,483,203.6	4,032.13		180 - 190	conventional	Upper HZ	**6.4**	---	2.4	---
MW-4[c]	478,681.5	1,483,079.6	4,029.08		175 - 185	conventional	Upper HZ	1.0	---	4.2	---
MW-5	478,579.7	1,483,553.9	4,033.79		182 - 192	conventional	Upper HZ	0.5	---	<1.0	---
MW-SF2	478,837.8	1,483,252.9	4,033.35		184 - 199	conventional	Upper HZ	**8.3**	---	**7.4**	---
MW-SF4	478,733.2	1,482,272.8	4,023.20		165-183	conventional	Upper HZ		---	---	---
MW-SF5	479,614.9	1,481,960.0	3,992.93		138 - 153	conventional	Upper HZ	1.7	---	<1.0	1.1
MW-SF6	479,654.5	1,480,848.4	3,976.12		117 - 132	conventional	Upper HZ	0.4	---	<1.0	<1.0
MW-SF9	478,481.9	1,484,636.7	4,030.08		188 - 203	conventional	Upper HZ	<0.5	---	<1.0	<1.0
MW-SF10	480,157.0	1,484,357.3	4,036.53		194 - 204	conventional	Upper HZ	**17**	---	**10**	**23**

RI/FS - Remedial Investigation/Feasibility Study (EPA, 2006)
* unsurveyed elevation
bold indicates above 5 µg/L
PCE – tetrachloroethene

ft amsl - feet above mean seal level
ft bgl - feet below ground level
µg/L - micrograms per liter

Table 2. Summary of water-level data from City of Las Cruces water supply wells

well	status	elevation (ft amsl)	depth to water Dec 2015 (ft bgl)	water-level elevation Dec 2015 (ft amsl)
Paz Park	irrigation	4,013	170.30	3,842.70
CLC 10	inactive	3,936	90.10	3,845.90
CLC 18	capture	4,044	213.90*	3,830.10
CLC 19	inactive	4,065.51	225.40	3,840.11
CLC 20	inactive	4,072	234.60	3,837.40
CLC 21	inactive	4,076.15	233.70	3,842.45
CLC 24	inactive	4,040	202.61	3,837.39
CLC 25	active	4,061.43	222.40	3,839.03
CLC 26	standby	4,011	174.58	3,836.42
CLC 27	capture	4,050	241.40*	3,808.60
CLC 28	active	4,061.86	219.65	3,842.21
CLC 29	active	3,893	46.58	3,846.42
CLC 30	inactive	3,886	48.10	3,837.90
CLC 31	active	3,896	25.45	3,870.55
CLC 32	active	3,903	74.05	3,828.95
CLC 33	active	3,910	57.70	3,852.30
CLC 35	active	3,885	65.56	3,819.44
CLC 38	inactive	4,098	258.55	3,839.45
CLC 44	inactive	4,007	161.40	3,845.60
CLC 54	inactive	4,110	262.85	3,847.15
CLC 57	inactive	4,130	284.25	3,845.75
CLC 58	active	3,877	53.10	3,823.90
CLC 59	active	3,892	40.10	3,851.90
CLC 60	inactive	3,948	102.40	3,845.60
CLC 61	active	4,013	201.75	3,836.75
CLC 62	active	3,936	232.60	3,843.40
CLC 65	active	3,875	47.45	3,827.55
CLC 67	active	3,902	51.00	3,851.00
CLC 70	active	3,897	52.70	3,844.30
CLC 71	active	3,900	41.90	3,858.10

ft amsl - feet above mean sea level ft bgl - feet below ground level
* pumping water level

3.0 DATA EVALUATION

3.1 Conceptual Site Model

Water-level and PCE-concentration data were evaluated by hydrogeologic zone and model layer. The hydrogeologic zones presented in the Remedial Investigation/Feasibility Study (RI/FS) by EPA (2006) are slightly different than layers in the Griggs and Walnut groundwater-flow and solute-transport model. A summary of the hydrogeologic zones for model Layers 1 through 3 is as follows:

1. Model Layer 1 represents the Upper Hydrogeologic Zone that is an unconfined aquifer consisting of sand and gravel.

2. Model Layer 2 represents the upper portion of the Lower Hydrogeologic Zone that primarily consists of silt and clay beds. EPA (2006) had identified model Layer 2 as part of the Lower Hydraulic Zone. The low-permeability beds (where present) limit hydraulic communication between the Upper Hydrogeologic Zone and the Lower Hydrogeologic Zone. The silt and clay beds in Layer 2 transition east of Well 18 to silt and sand.

3. Model Layer 3 represents the lower portion of the Lower Hydrogeologic Zone consisting of sand and gravel.

Cross-sections showing the Upper and Lower Hydrogeologic Zones are presented as Figures 3 and 4. The thickness and extent of the low-permeability silt and clay beds that divide Layer 1 from Layer 2 have influenced the lateral and vertical distribution of PCE in groundwater. At Well 18, the clay layer separating the Upper and Lower Hydrogeologic Zones creates a hydraulic barrier to vertical flow. East of GWMW16(S,D), the clay layer transitions to silt and sand allowing for vertical groundwater flow from the Upper to Lower Hydrogeologic Zones under downward head gradient conditions. Historically the PCE plume moved from west to east in the Upper Hydrogeologic Zone until it was able to migrate vertically into the Lower Hydrogeologic Zone. The eastward migration of the groundwater trough between 1960 and 2000 caused by municipal well pumping also played a role in the eastward migration of the PCE plume (JSAI, 2006). The areas of horizontal and vertical PCE plume migration are shown on Figure 3.

The clay layer dividing the Upper Hydrogeologic Zone from Lower Hydrogeologic Zone is shaped like a bowl with Well 18 near the low point. The lithology at GWMW16-D and re-assessment of GWMW11 lithologic log helped define the configuration of the clay layer (see Figs. 3 and 4). The head difference between the Upper and Lower Hydrogeologic Zones is about 7 ft where the clay layer is present, and minimal where the clay layer is absent (Table 3).

Table 3. Summary of head difference between Upper and Lower Hydrogeologic Zones measured in well pairs

well	hydrogeologic zone	December 2015 depth to water (ft bgl)	head difference[1] (ft)
GWMW11-S	Upper[2]	177.00	
GWMW11-D	Lower	185.75	8.75
GWMW15-S	Upper[3]	241.15	
GWMW15-D	Lower	241.36	0.21
GWMW16-S	Upper[2]	188.55	
GWMW16-D	Lower	194.40	5.85
MW-1	Upper[2]	191.90	
CLC Well 18	both	199.00[4]	7.10

[1] Positive number indicates a higher head in the Upper than the Lower Hydrogeologic Zone.
[2] Clay layer between Upper and Lower Hydrogeologic Zone is present.
[3] Clay layer between Upper and Lower Hydrogeologic Zone is present.
[4] non-pumping water level, and near same elevation as MW-1
ft bgl - feet below ground level

3.2 Water-Level Response to Pumping

Available water-level data from the Griggs and Walnut plume area were evaluated to determine hydraulic gradient, direction of groundwater flow, and drawdown caused by pumping Wells 18 and 27.

December 2015 regional groundwater flow contours and direction of groundwater flow are shown on Figure 5. The distance between water-level elevation contours across the City indicates a relatively flat hydraulic gradient outside of the Griggs and Walnut site. A drawdown cone in the regional aquifer is evident in the vicinity of Well 27 (Fig. 5).

Local direction of groundwater flow in the Upper Hydrogeologic Zone can be readily contoured where the underlying clay layer is present near Well 18. Water-level elevation contours for the Upper Hydrogeologic Zone are presented on Figure 6. The direction of lateral

groundwater flow in Upper Hydrogeologic Zone is northwest to southeast with a drawdown cone around Well 18 (Fig. 6). In the eastern part of the site, there is a slight downward head gradient due to Well 27 pumping where the Upper and Lower Hydrogeologic Zones are hydraulically connected due to the absence of the clay layer which separates the zones to the west near Well 18. Upper Hydrogeologic Zone hydrographs can be referenced from Appendix B. Water level declines are observed near Well 18 at MW-1 and MW-5 (Fig. B8). Water-level declines are also observed in the Upper Hydrogeologic Zone at GWMW09 (Fig B4), GWMW10 (Fig. B5), and GWMW15 (Fig. B7), where the clay layer is absent and water levels are influenced by pumping from Well 27.

Water-level elevation contours for the Lower Hydrogeologic Zone are presented on Figure 7. The cone of depression (drawdown) caused by Well 27 is illustrated by the water-level elevation contours within the 3,840-ft water-level elevation contour (Figs. 5 and 7). The horizontal hydraulic gradient outside of the 3,840-ft water-level elevation contour is generally flat as indicated by the water-level elevation range of 3,836 to 3,842 ft in City wells surrounding the Griggs and Walnut site (Table 2; Fig. 5). Lower Hydrogeologic Zone hydrographs can be referenced from Appendix B. Water-level declines are observed near Well 18 at MW-1 and MW-5 (Fig. B8).

3.3 PCE Plume Configuration and Mass

Over the past 8 years, the relatively flat hydraulic gradient across the Griggs and Walnut site, and focused pumping from capture wells (18 and 27), has kept the PCE plume in the general vicinity between Well 18 and Interstate 25. The highest PCE concentrations have been observed at Well 18, and the greatest vertical extent has been observed at GWMW09 and GWMW10 (Table 1).

It has become evident from GWMW01, GWMW16(S,D), and Well 18 PCE data results that the Lower Hydrogeologic Zone does not contain a PCE plume where the clay layer is present. Prior to operation of the remedial system, when Well 18 was not pumping, the high PCE concentrations in Upper Hydrogeologic Zone recharged the Lower Hydrogeologic Zone by migration through the gravel packed annulus of Well 18. The higher groundwater head in the Upper Hydrogeologic Zone than the Lower Hydrogeologic Zone (Table 3) allows for water to drain by gravity through Well 18 under non-pumping conditions. The elevated PCE concentrations in the Lower Hydrogeologic Zone around Well 18 were then removed by pumping Well 18.

Configuration of the 2015 PCE plume is shown by Upper and Lower Hydrogeologic Zones on Figures 8 and 9, respectively. The PCE plume (>5 µg/L) in the Upper Hydrogeologic Zone appears to be narrow, extending between Well 18 and MW-SF10 (Fig. 8). The northeastern portion of PCE plume in the Upper Hydrogeologic Zone, between GWMW16-S and MW-SF10, is likely migrating into the Lower Hydrogeologic Zone and captured by Well 27, as shown by the water-level elevation contours on Figure 9. The 2015 average PCE concentration in Upper Hydrogeologic Zone within this narrow plume is estimated at 20 µg/L, with the highest PCE concentration of 23 µg/L observed from MW-SF10 (Fig. 8).

The PCE plume (>5 µg/L) in the Lower Hydrogeologic Zone occurs where the clay layer becomes coarser grained east of Well 18, and there is vertical downward groundwater flow induced by pumping Well 27 (Fig. 9). The extent of PCE plume in the Lower Hydrogeologic Zone is defined by monitoring points GWMW01, GWMW09, GWMW10, GWMW11-I, GWMW15-I, GWMW16-D, and Well 27. The PCE plume on Figure 9 is within the 3,840 ft water level elevation contour and Well 27 capture area. The average PCE concentration in the narrow plume in the Lower Hydrogeologic Zone is estimated at 15 µg/L, with the highest 2015 PCE concentration of 16 µg/L observed at GWMW09 (Port 5).

Trends in PCE concentrations at GWMW15-S and -I indicate vertical migration from the shallow well to the intermediate well over the last 10 years (Table 1). GWMW09 and GWMW10 multi-port wells have also shown a downward shift, reduction in thickness, and reduced concentrations of the PCE plume (see Table 1 and graphs in Appendix B).

The estimated 2005 PCE plume mass was 152 kilograms (kg) when using an effective porosity of 20 percent and 2005 monitoring results (JSAI, 2006). The calculated PCE plume mass was re-evaluated in 2013, and estimated to be 21.4 kg (JSAI, 2013).

The calculated 2015 PCE plume mass is 29.5 kg (Table 4). PCE mass removal by pumping Wells 18 and 27 during the years 2014 and 2015 totaled 10.4 kg (22.9 lbs) (DBSA, 2016). Therefore combining the 2015 estimated PCE plume mass (Table 4) and PCE mass removed since 2013 indicates the 2013 plume mass was about 39.9 kg instead of the estimated 21.4 kg.

The primary discrepancy between the calculated PCE mass for 2013 and 2015 is reflected in extending the plume eastward to GWMW15-I. Monitoring results from 2013 indicated the PCE plume had retreated west of GWMW09, because results from GWMW09 and GWMW15 were below detection limits.

Table 4. Updated estimates of the volume of groundwater containing PCE and the current mass of PCE in groundwater at the Griggs and Walnut site

Zone	average thickness (ft)	2015 plume area (ft^2)	volume of groundwater (liters)*	estimated average PCE concentration (µg/L)	revised PCE mass (kg)
Upper	30	784,000	133,187,610	20	2.7
Lower	150	2,100,000	1,783,643,400	15	26.8
					29.5

* Using an effective porosity of 20 percent
µg/L - micrograms per liter
kg - kilograms

3.4 Well 18 Performance

Well 18 experienced significant variations in PCE concentrations during the first year of pumping (April 2012 to February 2013; Fig. 2). All available data from the first year of pumping were reviewed, and performance testing and analysis of the capture efficiency for Well 18 were performed. The primary issue with Well 18 was the reduction in PCE concentration that occurred between June and December of 2012 (Fig. 2).

An assessment of the well hydraulics revealed that Well 18 yields water from horizontal flow through the screen interval (315 to 516 ft below ground level; bgl), and from vertical flow through the saturated gravel pack in the annulus between the formation and well casing above the screen interval (199 to 315 ft bgl; Fig. 4). The component of vertical flow through the gravel pack was calculated at 17 gallons per minute (gpm) (JSAI, 2015). Well 18 captures high PCE groundwater from the Upper Hydrogeologic Zone.

Well 18 has been operated by pumping the well at a rate of 170 gpm for 4 hours/day, which averages about 29.8 gpm (Table 5). Considering the optimized pumping schedule to maximize mass removal, the PCE concentrations from Well 18 have decreased since the system has been in operation (Fig. 2). Maximum PCE concentrations have dropped from 70 µg/L to less than 20 µg/L. Continued pumping at an average rate of 28 gpm (170 gpm 4 hours/day) with a PCE concentration of 15 µg/L would result in a PCE mass removal rate of 0.84 kg/year.

Table 5. Summary of 2015 average monthly pumping rates for Wells 18 and 27

month	Well 18 (gal)	Well 27 (gal)	Well 18 (gpm)	Well 27 (gpm)
1/31/2015	1,308,000	7,301,000	29.3	163.6
2/28/2015	1,164,000	6,363,000	28.9	157.8
3/31/2015	1,306,000	7,217,000	29.3	161.7
4/30/2015	1,212,000	7,015,000	28.1	162.4
5/31/2015	1,253,000	7,380,000	28.1	165.3
6/30/2015	1,259,000	7,193,000	29.1	166.5
7/31/2015	1,316,000	7,326,000	29.5	164.1
8/31/2015	1,265,000	7,099,000	28.3	159.0
9/30/2015	1,270,000	7,202,000	29.4	166.7
10/31/2015	1,272,000	7,194,000	28.5	161.2
11/30/2015	1,280,000	7,038,000	29.6	162.9
12/31/2015	1,741,000	6,973,000	39.0	156.2
average			**29.8**	**162.3**

gpm - gallons per minute

3.5 Well 27 Performance

The pumping rate from Well 27 is currently averaging 162 gpm (Table 5), and the PCE concentration continues to slowly increase with time (Fig. 2). Well 27 appears to be adequately capturing the PCE plume in the Lower Hydrogeologic Zone, as indicated by the cone of depression (Fig. 9) and stable PCE concentrations (Fig. 2). JSAI (2015) recommended to increase pumping from Well 27 to 200 gpm with an average annual rate of 180 gpm.

Pumping at an average annual rate of 180 gpm with a PCE concentration of 14 µg/L would result in a PCE mass removal rate of 5.0 kg/year.

4.0 GRIGGS AND WALNUT PLUME MODEL RESULTS

The Griggs and Walnut groundwater-flow and solute-transport model (JSAI, 2006) was used for the EPA feasibility study and remedial design (EPA, 2006). The model was updated in 2009, and some minor modifications were made and reported by JSAI (2009). The primary updates involved adjustments to the regional pumping in the vicinity of the Griggs and Walnut plume. The significant reduction in pumping from municipal wells surrounding the Griggs and Walnut site has resulted in a reduction in the model-simulated pumping rate required for plume containment and removal.

4.1 Model Update

The historical-transient groundwater-flow model was updated to simulate pumping effects through December 2015. Model-simulated pumping from Wells 18 and 27 was re-allocated to the model layers representative of the back plugging and reconfigured screen intervals.

4.2 Model Results

Graphs of observed and model-simulated PCE concentrations can be referenced from Appendix C. Reasonable matches of observed to model-simulated PCE are made for Wells 18 and 27 (Figs. C1 and C2). As previously identified, the model does not simulate the eastward transport of the PCE plume to GWMW15, as indicated by the current results for GWMW09 (Fig. C4) and GWMW15 (Fig. C7). The model simulates a slight increase in PCE concentration at GWMW11 from 1988 to current (Fig. C6); however, the model-simulated concentrations remain below 5 µg/L. The first PCE detection for GWMW11 was observed in the 2015 results for GWMW11-I (Table 1).

Future model runs were simulated by pumping Well 18 at an average rate of 25 gpm, and Well 27 at an average rate of 200 gpm. Model simulated PCE concentrations for Wells 18 and 27 are shown on Figures 10 and 11, respectively. The model indicates the potential for PCE plume clean up at Well 18 will occur in the next 5 years (Fig. 10), and the potential for PCE plume clean up at Well 27 will occur in the next 10 years. These estimates are based on efficient plume capture and removal of a uniform PCE plume, which may be an unrealistic assumption as the plume continues to reduce in size, and potentially become partitioned.

5.0 FINDINGS

The Griggs and Walnut capture pumping and data collection have provided evidence that the plume is decreasing in mass and remedial progress is being made. The capture efficiency issue with Well 18 has been investigated and resolved. Tracking capture efficiency of Well 18 can be easily performed by field measurements of pumping rate, water level, and specific conductance.

Past definition of the extent of the PCE plume has been skewed by correlating results from GWMW01 to other wells around the perimeter of the PCE plume. The PCE concentrations at GWMW01 were influenced by recharge from Upper Hydrogeologic Zone to the Lower Hydrogeologic Zone through the gravel pack annulus of Well 18. Results from GWMW16(S,D) have helped refine the Conceptual Site Model and PCE plume extent in the Upper and Lower Hydrogeologic Zones.

The clay layer separating the Upper from the Lower Hydrogeologic Zone is bowl shaped. The Upper Hydrogeologic Zone PCE plume is mostly contained by the bowl shape configuration of the clay layer. Well 18 is located in the low point of the clay layer, which allows for efficient capture from the PCE plume in the Upper Hydrogeologic Zone underlain by the clay layer. The Upper Hydrogeologic Zone PCE plume and the Lower Hydrogeologic Zone PCE plume appear to be connected in a localized area between GWMW16(S,D) and MW-SF10 where the clay pinches out to the east or northeast.

Revisions to the estimation of PCE mass in groundwater are based on the plume extent in the Upper and Lower Hydrogeologic Zones (see Figs. 8 and 9; Table 3). The revised estimated total PCE mass in groundwater is 29.5 kg, and the potential removal rate from Wells 18 and 27 combined is 5.84 kg/year, provided PCE concentrations at Wells 18 and 27 remain the same as those observed in 2015.

Well 18 captures the PCE in the Upper Hydrogeologic Zone where the underlying clay layer is present. Well 27 captures the PCE plume from the Upper Hydrogeologic Zone where the underlying clay layer is absent and from the Lower Hydrogeologic Zone.

Results from the updated Griggs and Walnut groundwater-flow and solute-transport model indicate the pump and treat system is performing better than expected for the first three years of operation; this maybe largely in part to the revised understanding of the PCE plume distribution and mass, and optimization of Wells 18 and 27. However, mass removal rates are expected to decrease as the PCE plume reduces in size and non-impacted groundwater is captured.

6.0 RECOMMENDATIONS

The following actions are recommended:

1. Continue to collect data on pumping rate, water level, and specific conductance from Well 18, and use the data to track and optimize the PCE mass removal rate. The recommended pumping schedule for Well 18 is 170 gpm 4 hours/day.

2. Continue to collect data on pumping rate, water level, and PCE concentrations from Well 27, and use the data to track and optimize the PCE mass removal rate. The recommended pumping schedule for Well 27 to 200 gpm with an average annual rate of 180 gpm.

3. Additional data from GWMW16(S,D) are needed to verify results from these monitoring points. It is recommended to perform at least two sampling events in 2016.

7.0 REFERENCES

[EPA] U.S. Environmental Protection Agency, 2006, Remedial investigation report, Griggs and Walnut Ground Water Plume Superfund Site, Las Cruces, Doña Ana County, New Mexico, EPA ID NM0002271286: prepared by CH2M Hill, Inc.

Fetter, C.W., 1993, Contaminant hydrogeology: Macmillan Publishing Company, New York, 458 p.

[JSAI] John Shomaker & Associates, Inc., 2006, Ground-water-flow and solute-transport model for the Griggs and Walnut Superfund Site, Las Cruces, New Mexico: consultant's report prepared by JSAI for City of Las Cruces and the Griggs and Walnut Joint Superfund Project, November 2006.

[JSAI] John Shomaker & Associates, Inc., 2009, Updates to the groundwater model and recommendations for using City of Las Cruces Wells 18 and 27 to capture and contain the Griggs and Walnut Plume: consultant's technical memorandum prepared by JSAI for City of Las Cruces and the Griggs and Walnut Joint Superfund Project, November 2009.

[JSAI] John Shomaker & Associates, Inc., 2013, First year (May 2012 to May 2013) assessment of the Griggs and Walnut PCE Plume Capture Wells and recommendations for optimizing capture efficiency: consultant's report prepared by JSAI for City of Las Cruces.

[JSAI] John Shomaker & Associates, Inc., 2015, Recommends for the optimization of PCE capture from Wells 18 and 27: consultant's technical memorandum prepared by JSAI for City of Las Cruces, January 2015.

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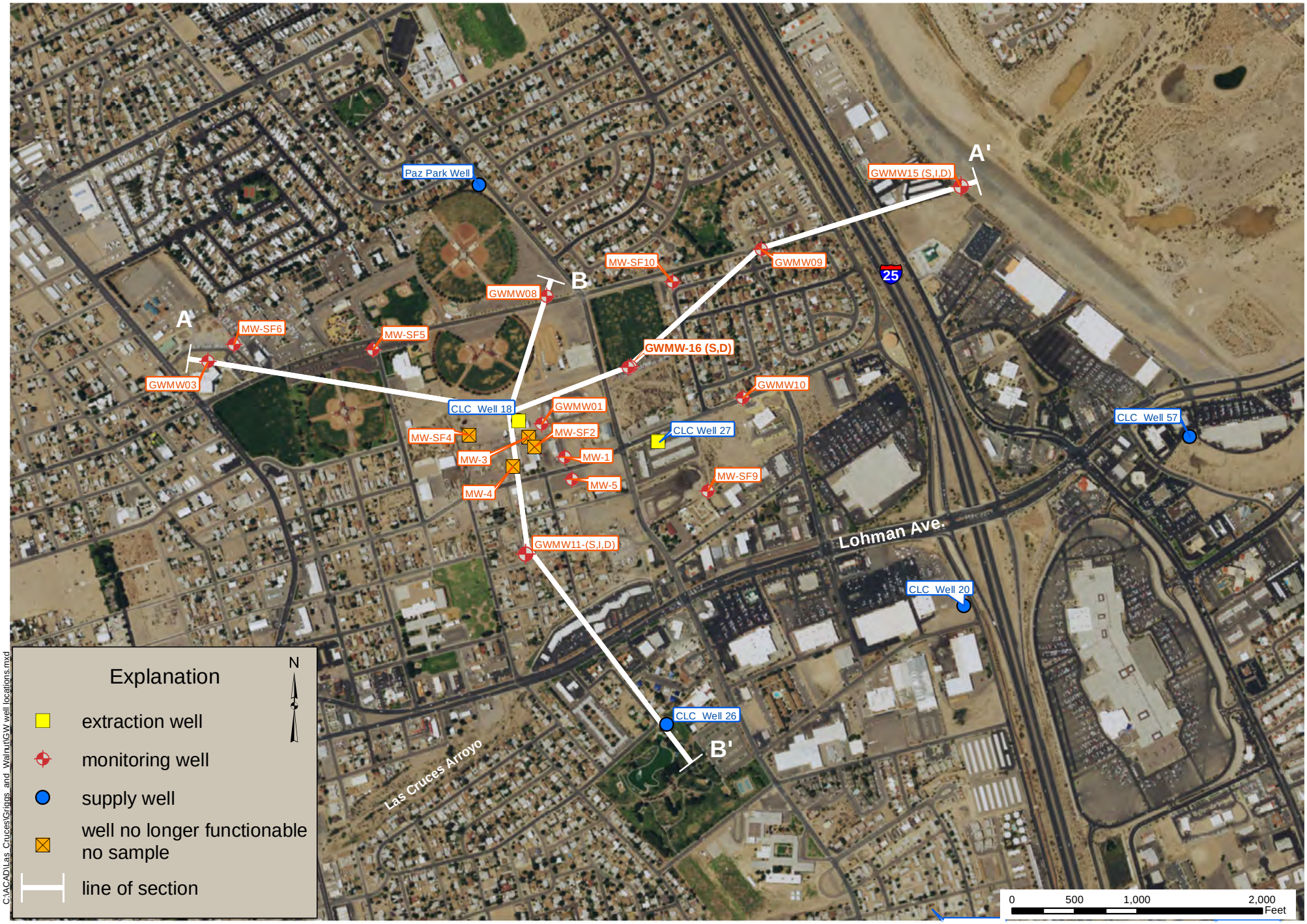
ILLUSTRATIONS



Aerial photography source: USDA, 2014

Figure 1. Aerial photograph of the Griggs and Walnut site showing well locations, City of Las Cruces, New Mexico.

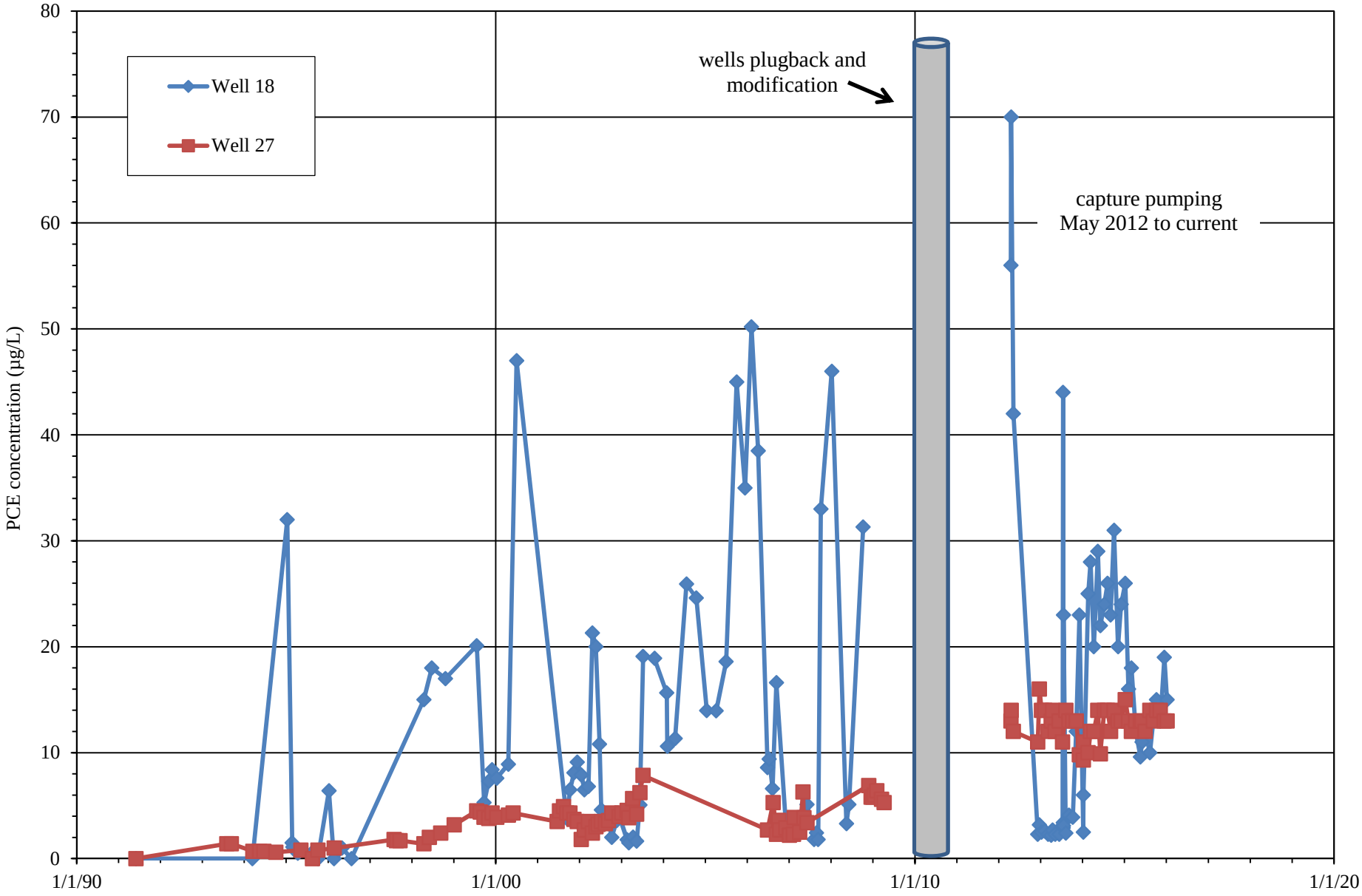
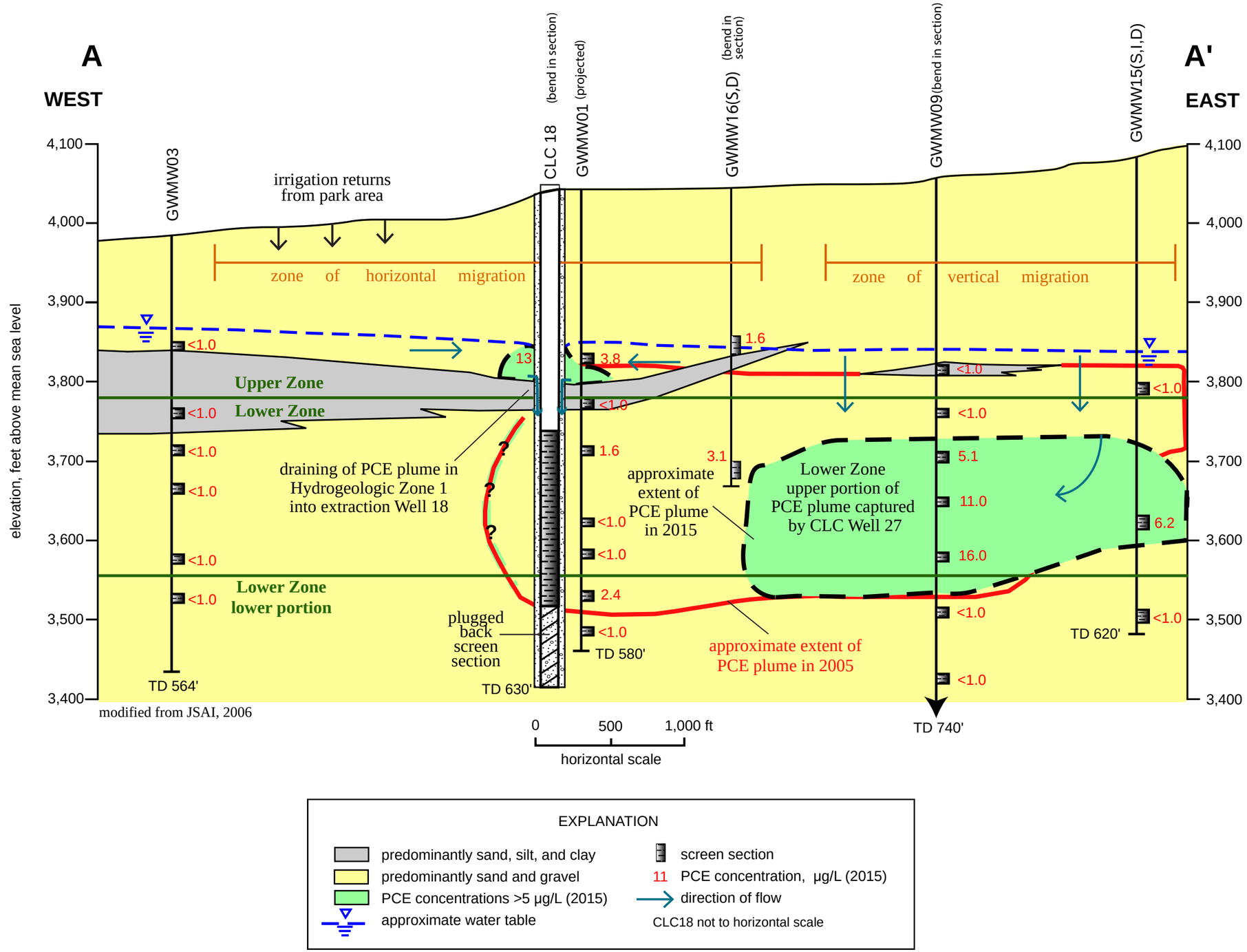


Figure 2. Graph showing PCE concentrations versus time for Well 18 and Well 27, Griggs and Walnut site, City of Las Cruces, New Mexico.



modified from JSAI, 2006

Figure 3. Hydrogeologic cross-section A-A' with November 2015 PCE concentrations, Griggs and Walnut site, City of Las Cruces, New Mexico.

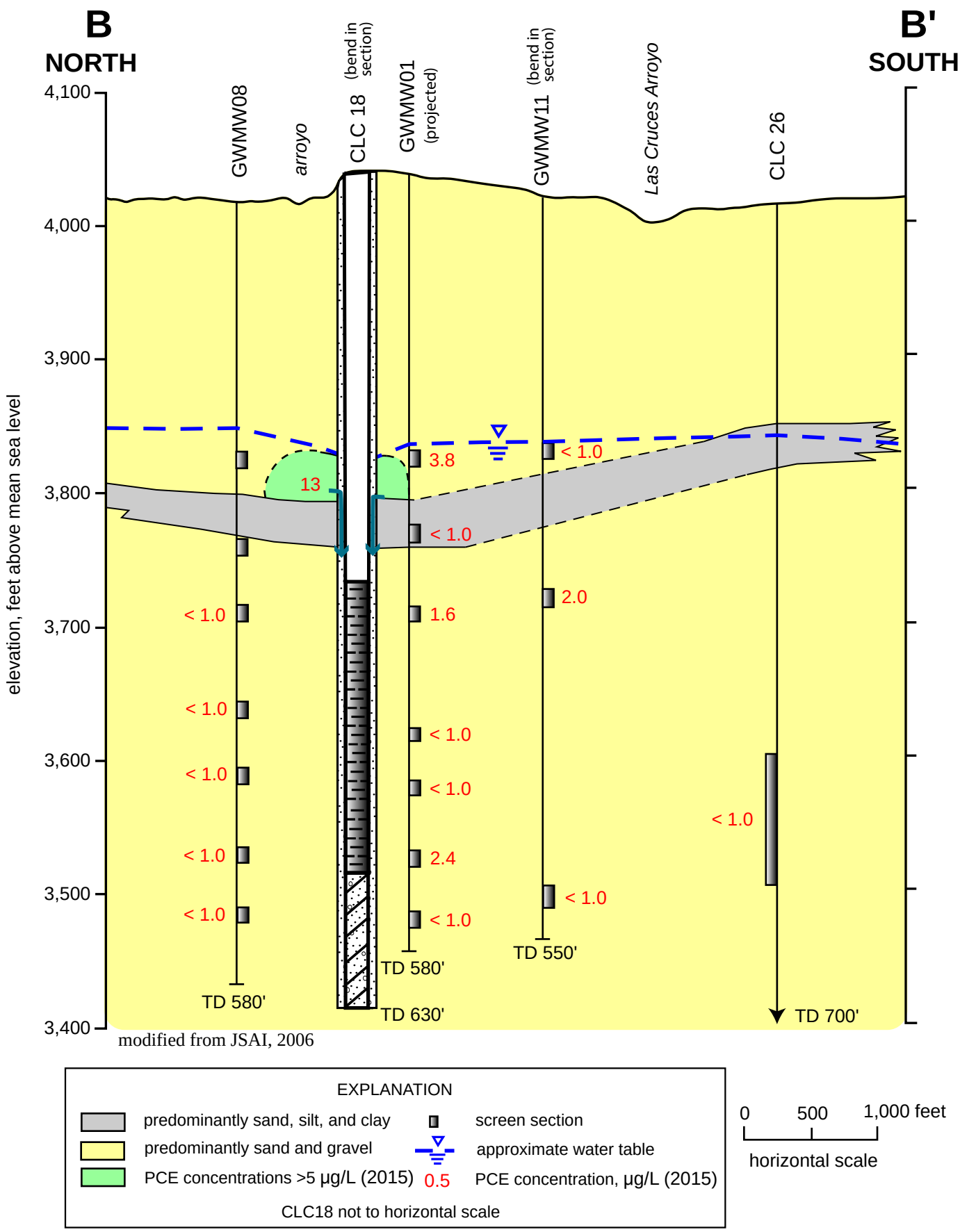


Figure 4. Hydrogeologic cross-section B-B' with November 2015 PCE concentrations, Griggs and Walnut site, City of Las Cruces, New Mexico.

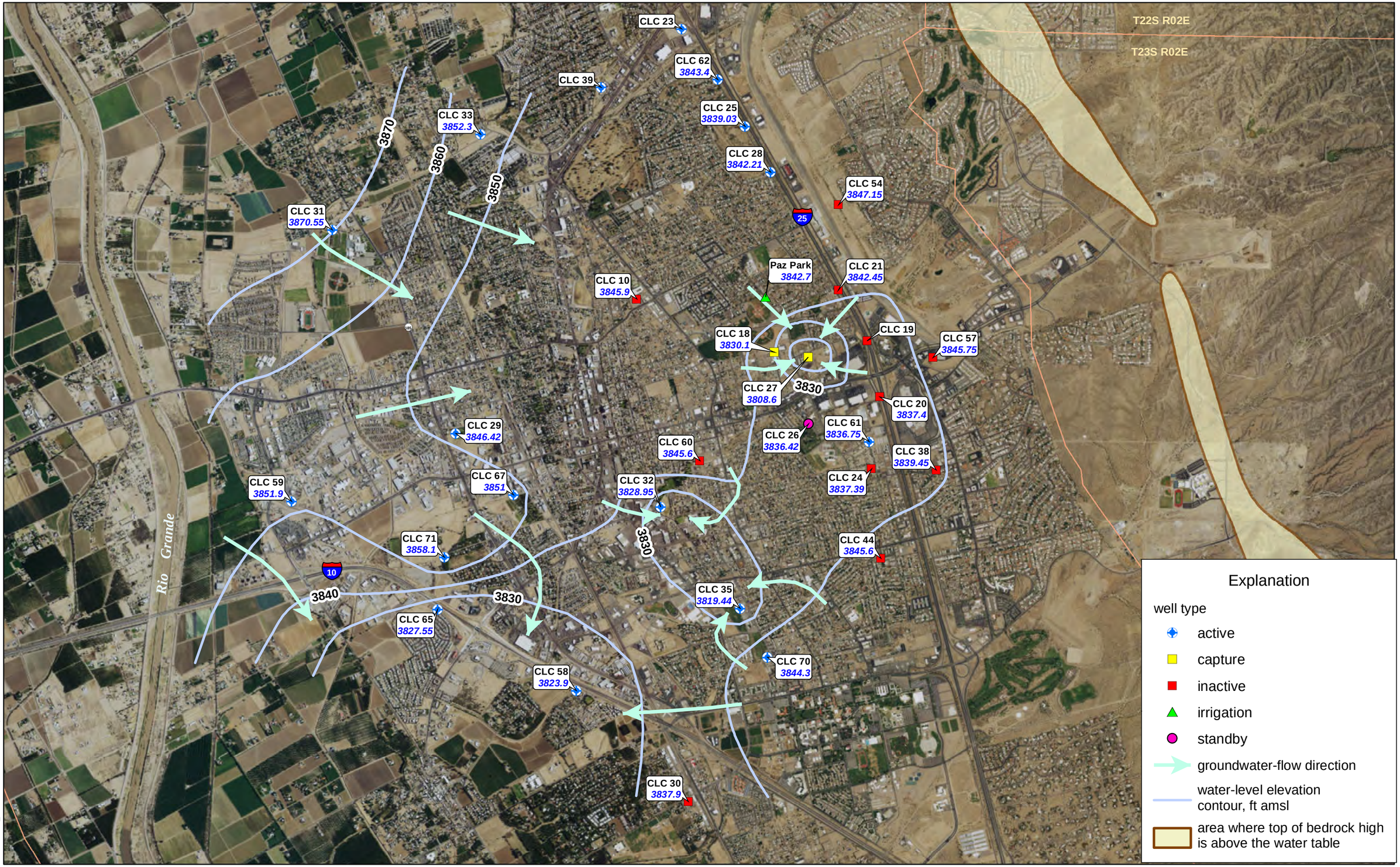
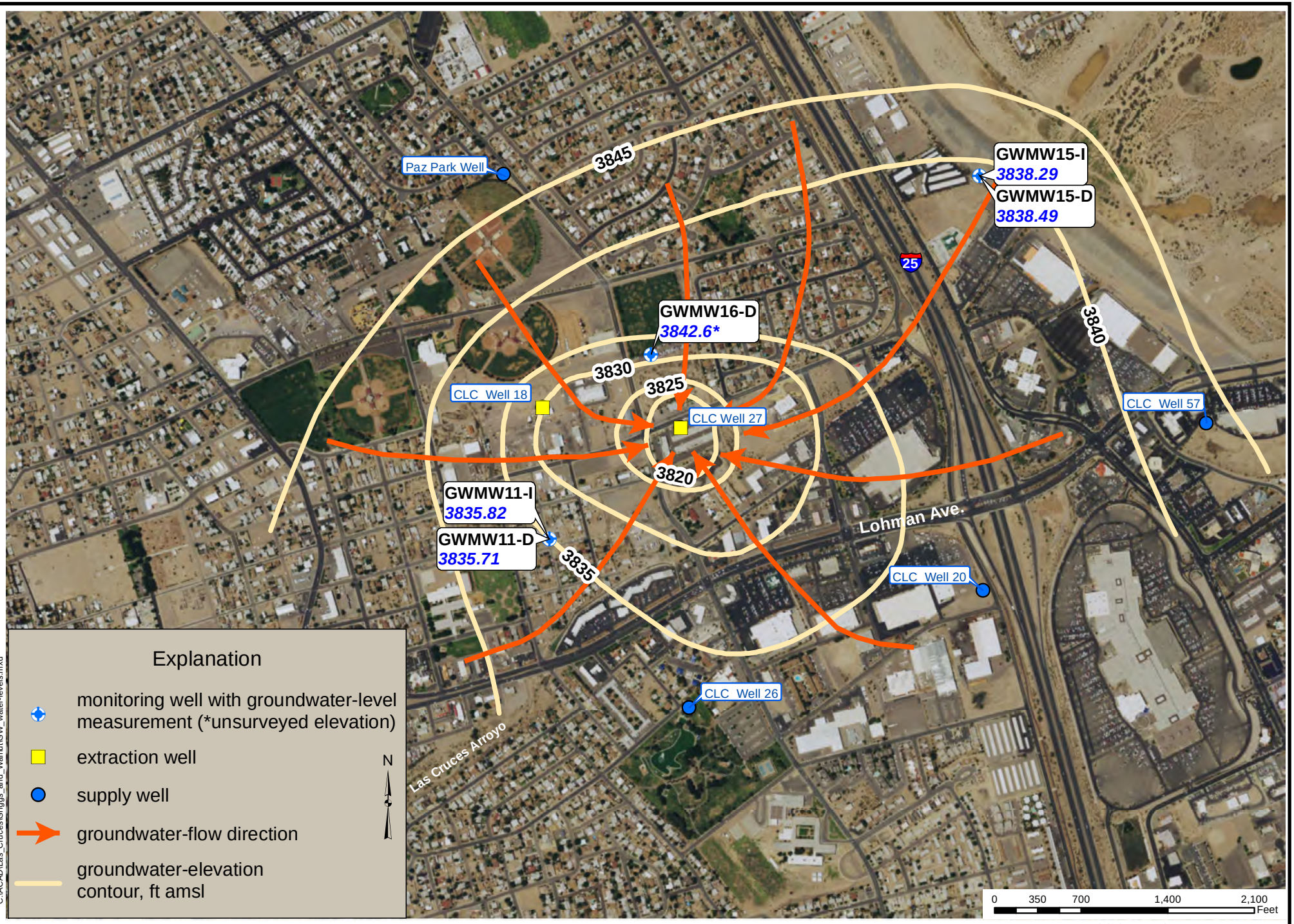


Figure 5. Aerial photograph showing December 2015 water-level elevation contours for the City of Las Cruces area.

Aerial photography source: USDA, 2014

Figure 6. Aerial photograph showing November 2015 water-level elevation contours for the Upper Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.



Aerial photography source: USDA, 2014

Figure 7. Aerial photograph showing November 2015 water-level elevation contours for the Lower Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 8. Aerial photograph showing November 2015 PCE concentrations and groundwater-elevation contours for the Upper Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

Figure 9. Aerial photograph showing November 2015 PCE concentrations and groundwater-elevation contours for the Lower Hydrogeologic Zone, Griggs and Walnut site, City of Las Cruces, New Mexico.

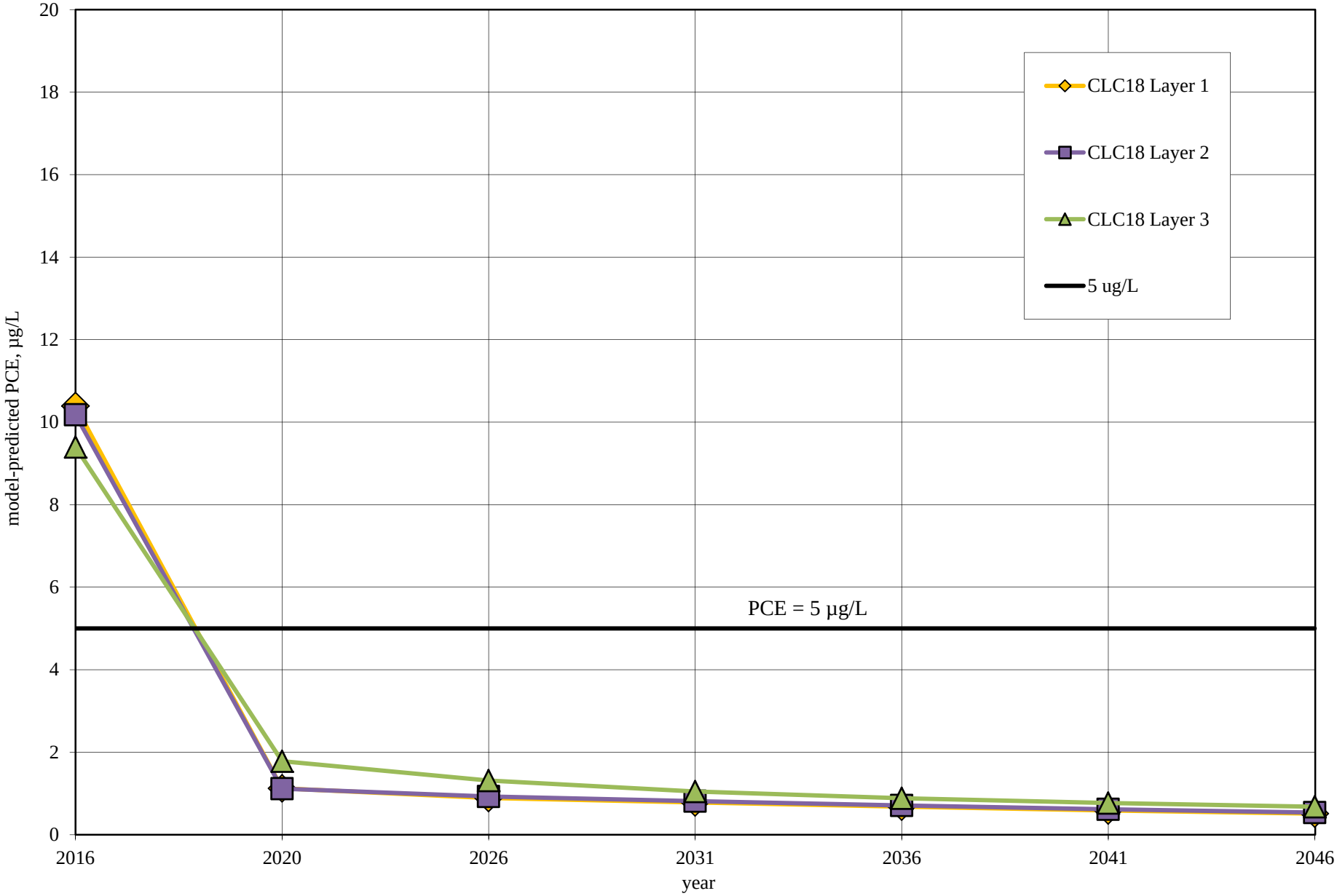


Figure 10. Graph of model-simulated PCE concentrations for Well 18 in Layers 1 and 2, with Well 27 pumping at 200 gpm and Well 18 pumping at 25 gpm, Griggs and Walnut site, City of Las Cruces, New Mexico.

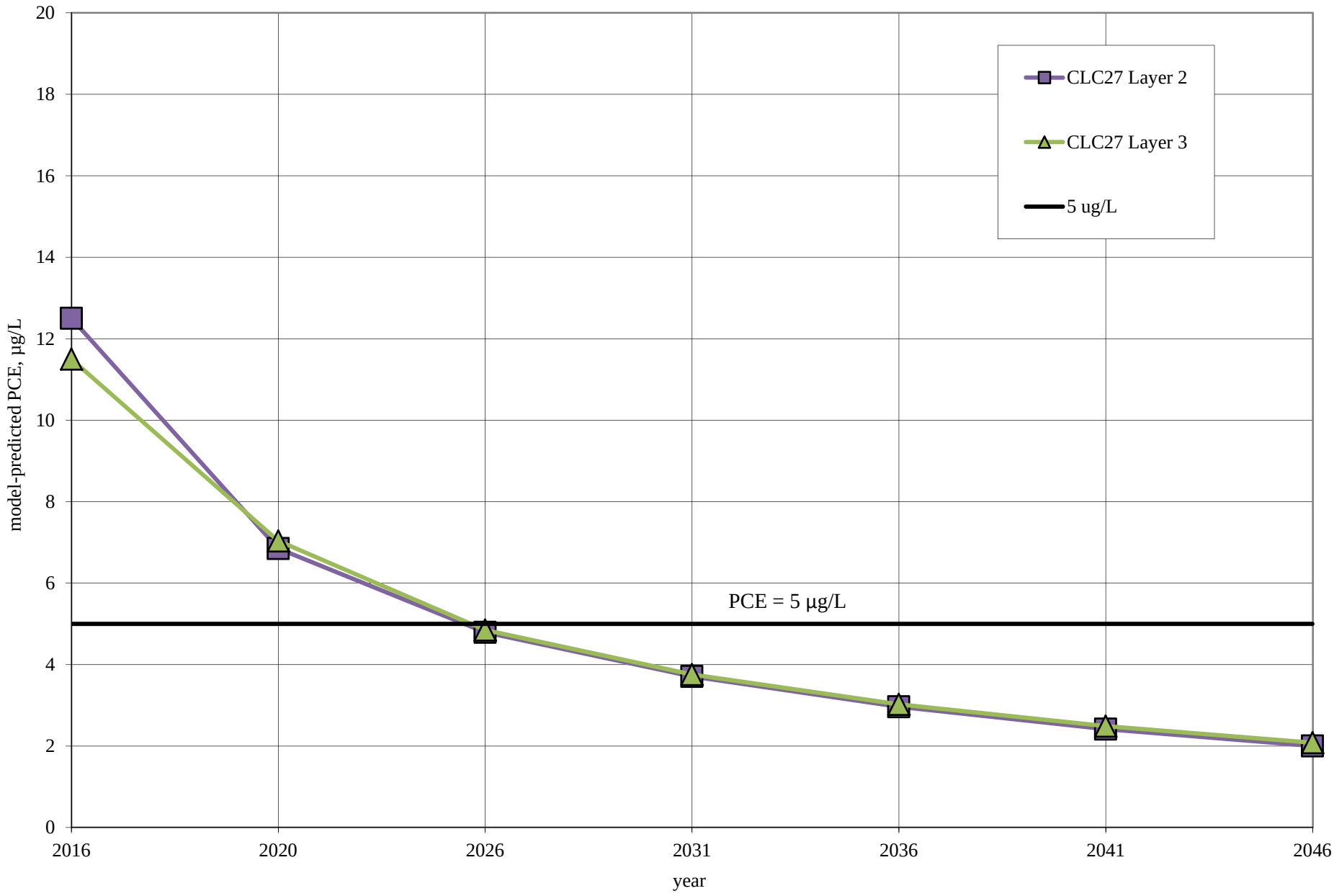


Figure 11. Graph of model-simulated PCE concentrations for Well 27 in Layers 2 and 3, with Well 27 pumping at 200 gpm and Well 18 pumping at 25 gpm, Griggs and Walnut site, City of Las Cruces, New Mexico.

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APPENDICES

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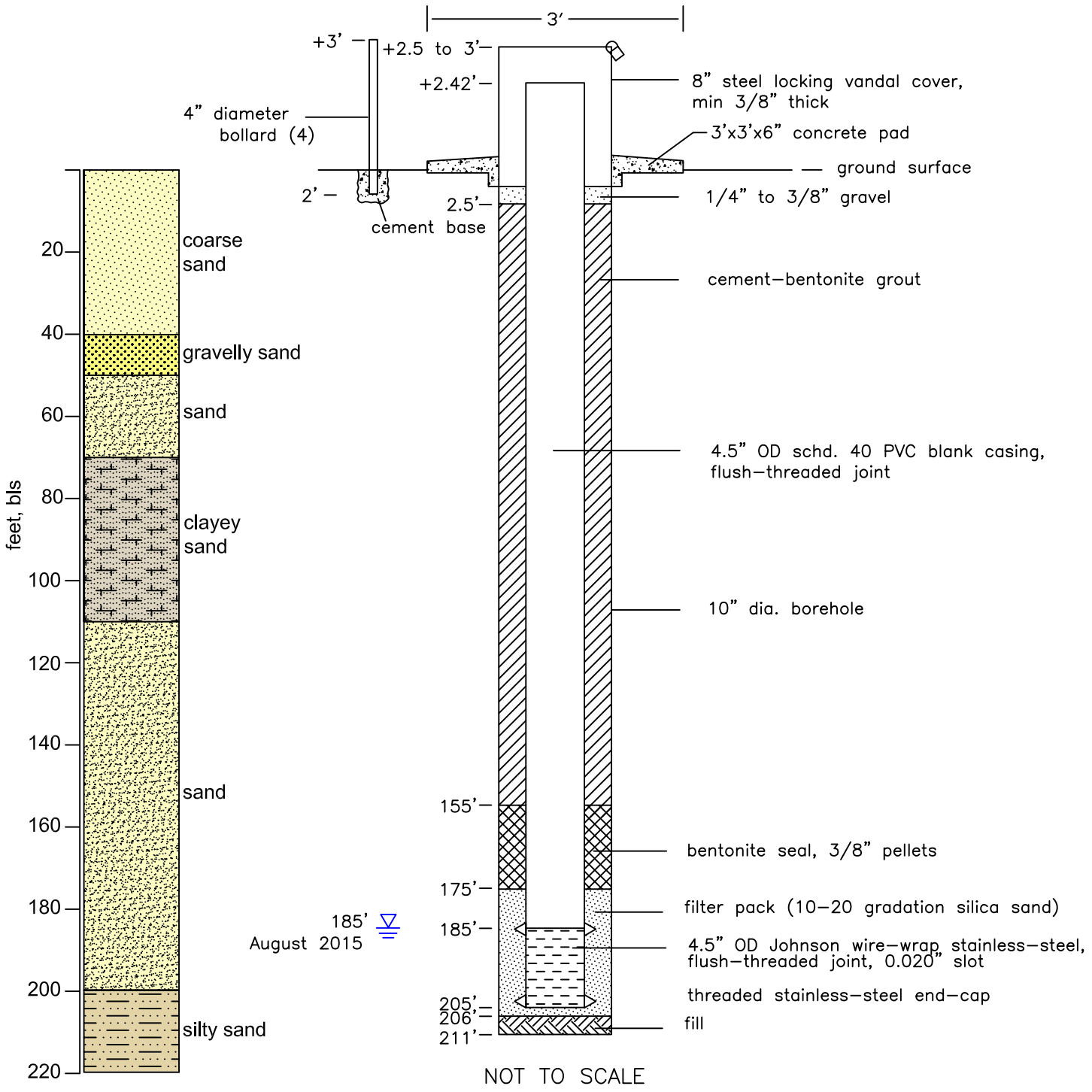
Appendix A.

Well completion diagram and lithologic logs for monitoring wells GWMW16(S,D)

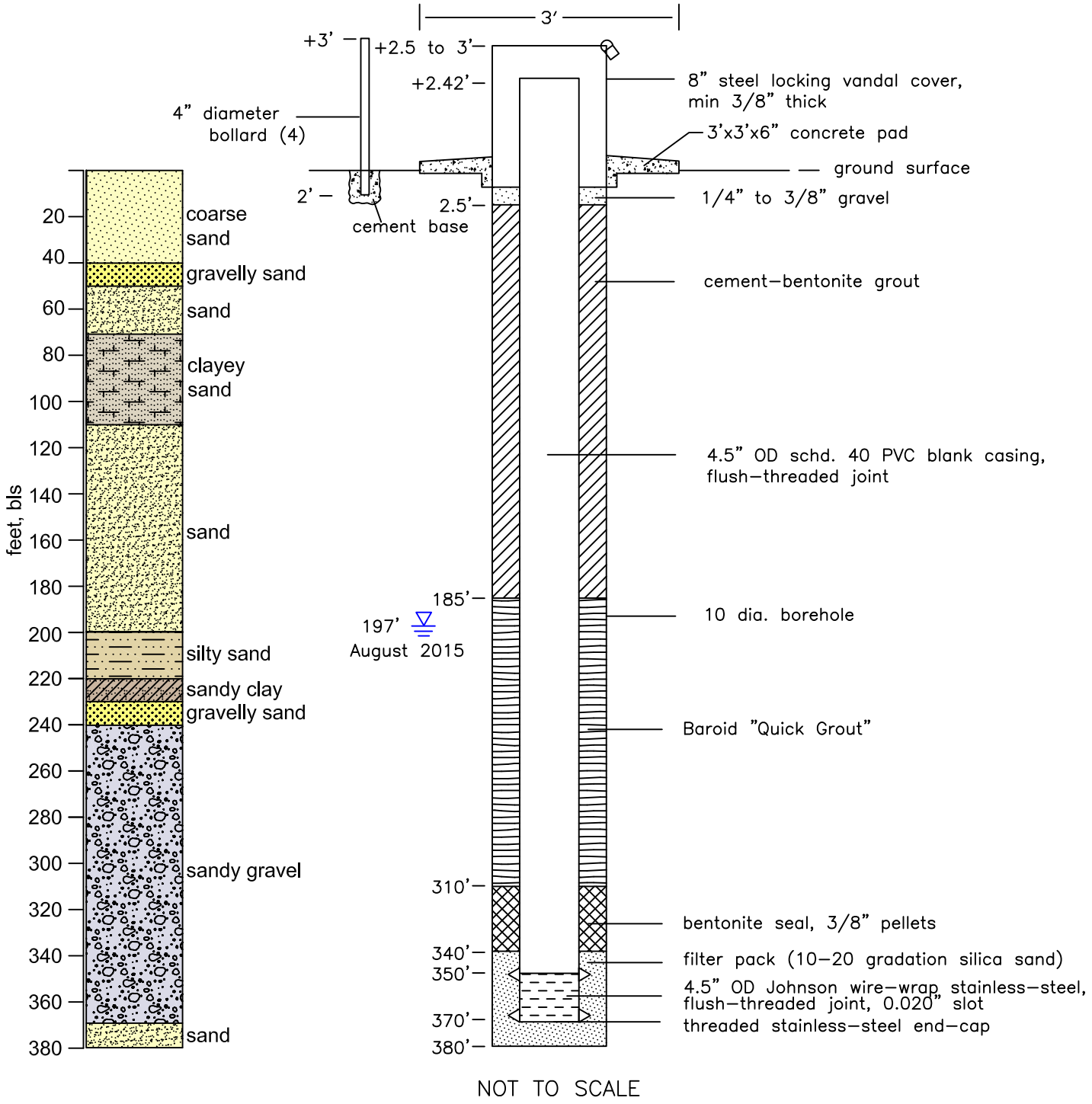


Well completion diagram for monitoring well GWMW16-S, Las Cruces, New Mexico.

JOHN SHOMAKER & ASSOCIATES, INC.

GW proposed wells

02/11/2016



Well completion diagram for monitoring well GWMW16-D, Las Cruces, New Mexico.

Lithologic Log, Well GWMW16-S

depth (ft bgl)	headspace VOC (ppm)	description
samples collected with a shovel from the cyclone discharge		
0-5	-	hand dug to 5 ft bgl; weathered asphalt, gravel, sand, and garbage
5-20	0.2	gravelly sand: beige; sand, fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 85%; gravel, rounded to angular, 2mm to 20mm, 15%; strong reaction to dilute hydrochloric acid
20-30	0.1	gravelly sand: beige; fine to medium, sub rounded to angular, mainly quartz, feldspar, and chert, 80%; gravel, 2mm to 18mm, rounded to angular, 20%; moderate reaction to dilute hydrochloric acid
30-40	0.1	gravelly sand: light brown; sand fine to medium, sub rounded to angular, mainly quartz, feldspar, and chert, 90%; gravel, sub angular to angular, 4.8mm to 18mm 10%; moderate reaction to dilute hydrochloric acid
40-50	0.2	gravelly sand: light brown; fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 80%; gravel, sub rounded to rounded, 4.8 to 25mm, 20%; moderate reaction to dilute hydrochloric acid
50-70	0.1 to 0.2	sand: light brown; fine to medium, sub rounded to sub angular, mostly quartz, feldspar, and chert; moderate reaction to dilute hydrochloric acid
70-90	0.1	sand with interbedded clay: light brown; very fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 90%; clay, light tan, sticky, 10%; moderate reaction to dilute hydrochloric acid
90-110	0.2 to 0.3	sand: light brown; very fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert
110-120	0.2	gravelly sand: light brown; fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 95%; Fine gravel, 4.8mm to 8mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones, 5%
120-130	0	sand: light brown; very fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert
130-150	0 to 0.5	sand: light brown; medium to coarse, sub rounded to sub angular, mainly quartz, feldspar, and chert
150-160	0.4	sand: light brown; very fine to medium, rounded to sub angular, mainly quartz, feldspar, and chert
160-180	0.4 to 0.6	sand: light brown; fine to coarse, sub rounded to sub angular, mainly quartz, feldspar, and chert

Lithologic Log, Well GWMW16-S

depth (ft bgl)	headspace VOC (ppm)	description
180-190	0.7	sand: light brown; very fine to medium, rounded to sub angular, mainly quartz, feldspar, and chert
190-200	0.3 to 0.6	sand: light brown; fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert
200-210		silty sand: light brown; sand, fine to medium, sub rounded to sub angular, 80%; silt, 20%; no reaction to dilute hydrochloric acid

ft bgl - feet below ground level
ppm - parts per million

Lithologic Log, Well GWMW16-D

depth (ft bgl)	headspace VOC (ppm)	description
samples collected with a shovel from the cyclone discharge		
0-5	-	hand dug to 5 ft bgl; weathered asphalt, gravel, sand, and garbage
5-10	0.5	sand, beige; fine to medium sub-rounded to sub-angular, trace tar/asphalt particles, strong reaction to dilute hydrochloric acid; moist
10-20	0.6	gravelly sand: beige; sand, fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 85%; gravel, 2mm to 20mm, rounded to angular, 15%; strong reaction to dilute hydrochloric acid
20-30	0.5	gravelly sand: beige, fine to medium, sub rounded to angular, mainly quartz, feldspar, and chert, 80%; gravel, 2mm to 18mm, rounded to angular, 20%; moderate reaction to dilute hydrochloric acid
30-40	0.2	gravelly sand: light brown; sand fine to medium, sub rounded to angular, mainly quartz, feldspar, and chert, 90%; gravel, sub angular to angular, 4.8mm to 18mm 10%; moderate reaction to dilute hydrochloric acid
40-50	0.4	gravelly sand: light brown; fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 80%; gravel, sub rounded to rounded, 4.8 to 25mm, 20%; moderate reaction to dilute hydrochloric acid.
50-60	0.3	sand: light brown; fine to medium, sub rounded to sub angular, mostly quartz, feldspar, and chert; moderate reaction to dilute hydrochloric acid
60-70	0 to 0.1	sand: light brown; very fine to medium, sub rounded to sub angular, mostly quartz, feldspar, and chert; moderate reaction to dilute hydrochloric acid
70-90	0.1	sand with interbedded clay: light brown; very fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 90%; clay, light tan, sticky, 10%; moderate reaction to dilute hydrochloric acid.
90-110	0 to 0.1	sand: light brown; very fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert
110-120	0	gravelly sand: light brown; fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 95%; fine gravel, 4.8mm to 8mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones, 5%
120-130	0	sand: light brown; very fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert; no reaction to dilute hydrochloric acid
130-150	0	sand: light brown; medium to coarse, sub rounded to sub angular, mainly quartz, feldspar, and chert; no reaction to dilute hydrochloric acid, trace silt, very dry

Lithologic Log, Well GWMW16-D

depth (ft bgl)	headspace VOC (ppm)	description
150-155	0.1	gravelly sand: light brown; sand, medium to coarse, sub rounded to angular, 60%; gravel, 4.8 to 5mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones 40%; no reaction to dilute hydrochloric acid
155-160	0.1	silty gravelly sand: light brown; sand, very fine to coarse, sub rounded to sub angular, 60%; silt, 30%; gravel, 4.8 to 5mm, angular, mostly andesites and altered basalts, with few limestones and sandstones 10%; no reaction to dilute hydrochloric acid
160-170	0.1	sand: light brown; fine to coarse, sub rounded to sub angular, mainly quartz, feldspar, and chert
170-180	0.2	gravelly sand: light brown; Sand, medium to coarse, sub rounded to angular, 70%; gravel, 4.8 to 40mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones 30%. no reaction to dilute hydrochloric acid
180-190	0.2	sand: light brown; very fine to medium, rounded to sub angular, mainly quartz, feldspar, chert
190-200	0.1	sand: light brown; fine to medium, sub rounded to sub angular, mainly quartz, feldspar, chert
200-210	0.2	silty sand: light brown; sand, fine to medium, sub rounded to sub angular, 80%; silt, 20%; no reaction to dilute hydrochloric acid
210-220	0.2	silty sand: light brown; sand, fine to medium, sub rounded to sub angular, 80%; silt, 20%; no reaction to dilute hydrochloric acid
220-230	0	sandy clay: light brown; sand, fine to medium, sub rounded to sub angular, mainly quartz, feldspar, and chert, 70%; clay, sticky, 30%
230-240	0	gravelly sand: light gray; sand, medium to coarse, sub-angular to angular, 80%; gravel, 4.8 to 15mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones 20%; no reaction to dilute hydrochloric acid
240-250	0	gravel: 4.8 to 15mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones 20%; no reaction to dilute hydrochloric acid
250-260	0.1	sandy gravel: light gray; gravel, 4.8 to 30mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones, 95%; sand, fine to medium, sub-rounded, 5%; no reaction to dilute hydrochloric acid

Lithologic Log, Well GWMW16-D

depth (ft bgl)	headspace VOC (ppm)	description
260-270	0.1	gravel: light gray, 4.8 to 40mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones
270-280	0.1	sandy gravel: light gray; gravel, 4.8 to 15mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones, 80%; sand, coarse, angular, 20%
280-290	0.1	sandy gravel: light gray; gravel, 4.8 to 20mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones, 80%; sand, coarse, angular, 20%
290-300	0.2	gravel: light gray, 4.8 to 20mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones
300-310	0.2	gravelly sand: light gray; sand, coarse, sub-angular to angular, 80%; gravel, 4.8 to 15mm, sub-angular to angular, mostly andesites and altered basalts, with few limestones and sandstones 20%. No reaction to dilute hydrochloric acid
310-320	0.1	gravel: light gray, 4.8 to 40mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones.
320-330	0.1	sandy gravel: light gray; gravel, 4.8 to 40mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones, 95%; sand, coarse, sub angular to angular, 5%; no reaction to dilute hydrochloric acid
330-350	0 to 0.2	gravel: light gray, 4.8 to 40mm, sub rounded to sub angular, mostly andesites and altered basalts, with few limestones and sandstones, trace sand and silt; rig chatter and largest gravel pieces at 345 ft bgl
350-360	0	sandy gravel: light gray; gravel, 4.8 to 10mm, sub angular to angular, mostly andesites and altered basalts, with few limestones and sandstones, 80%; sand, coarse, angular, 20%
360-370	-	sandy gravel: light gray; gravel, 4.8 to 15mm, sub angular to angular, mostly andesites and altered basalts, with few limestones and sandstones, 85%; sand, medium to coarse, sub rounded to angular, 15%; no reaction to dilute hydrochloric acid
370-380	0.1	sand: light gray; medium to coarse, sub-rounded to angular, quartz, andesites and altered basalts; no reaction to dilute hydrochloric acid

ft bgl - feet below ground level
ppm - parts per million

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Appendix B.

Selected hydrographs from wells in the Griggs and Walnut plume area

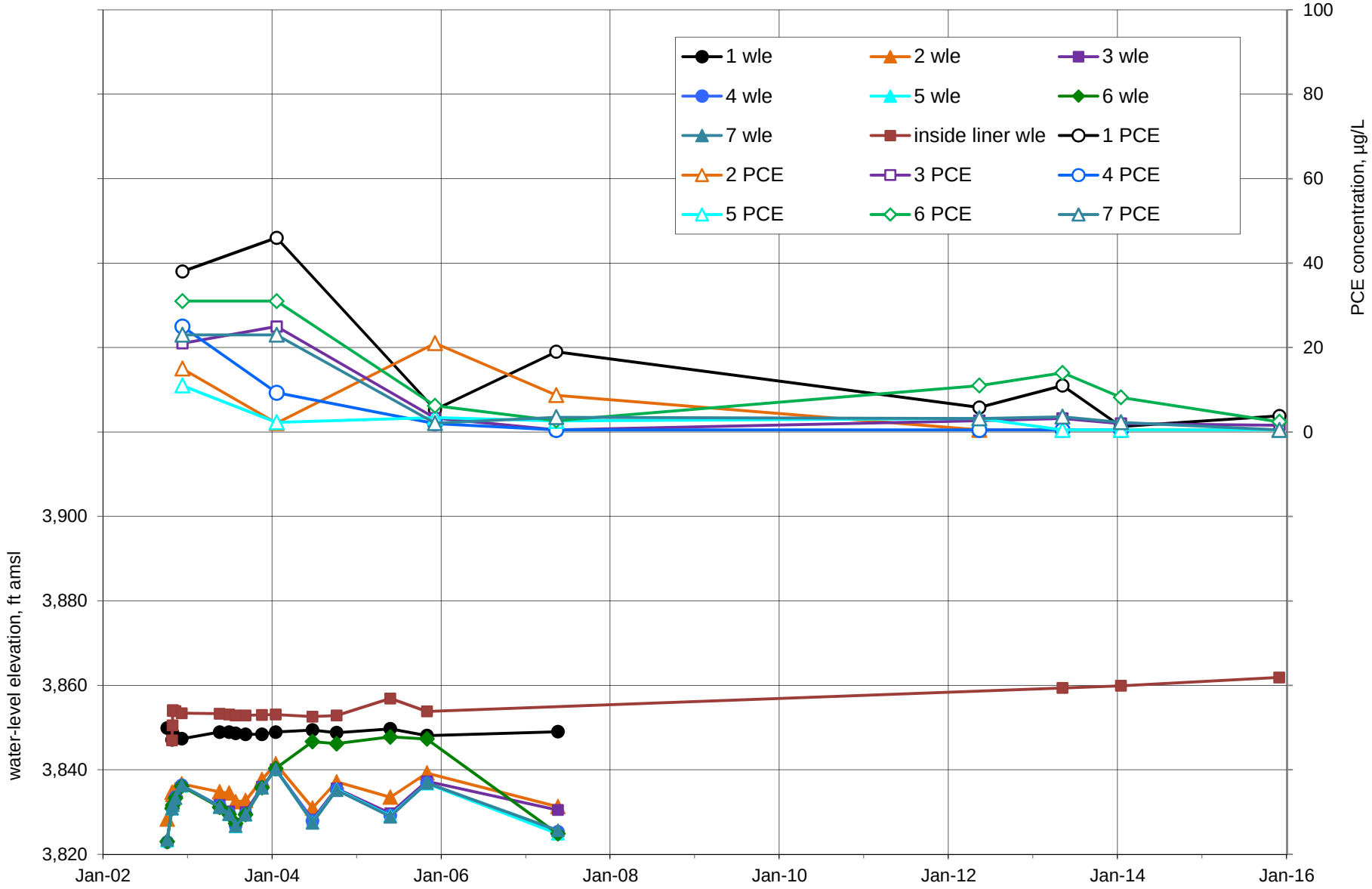

Figure B1. Graph of GWMW01 (Ports 1-7 and inside liner) observed water levels and PCE concentrations.

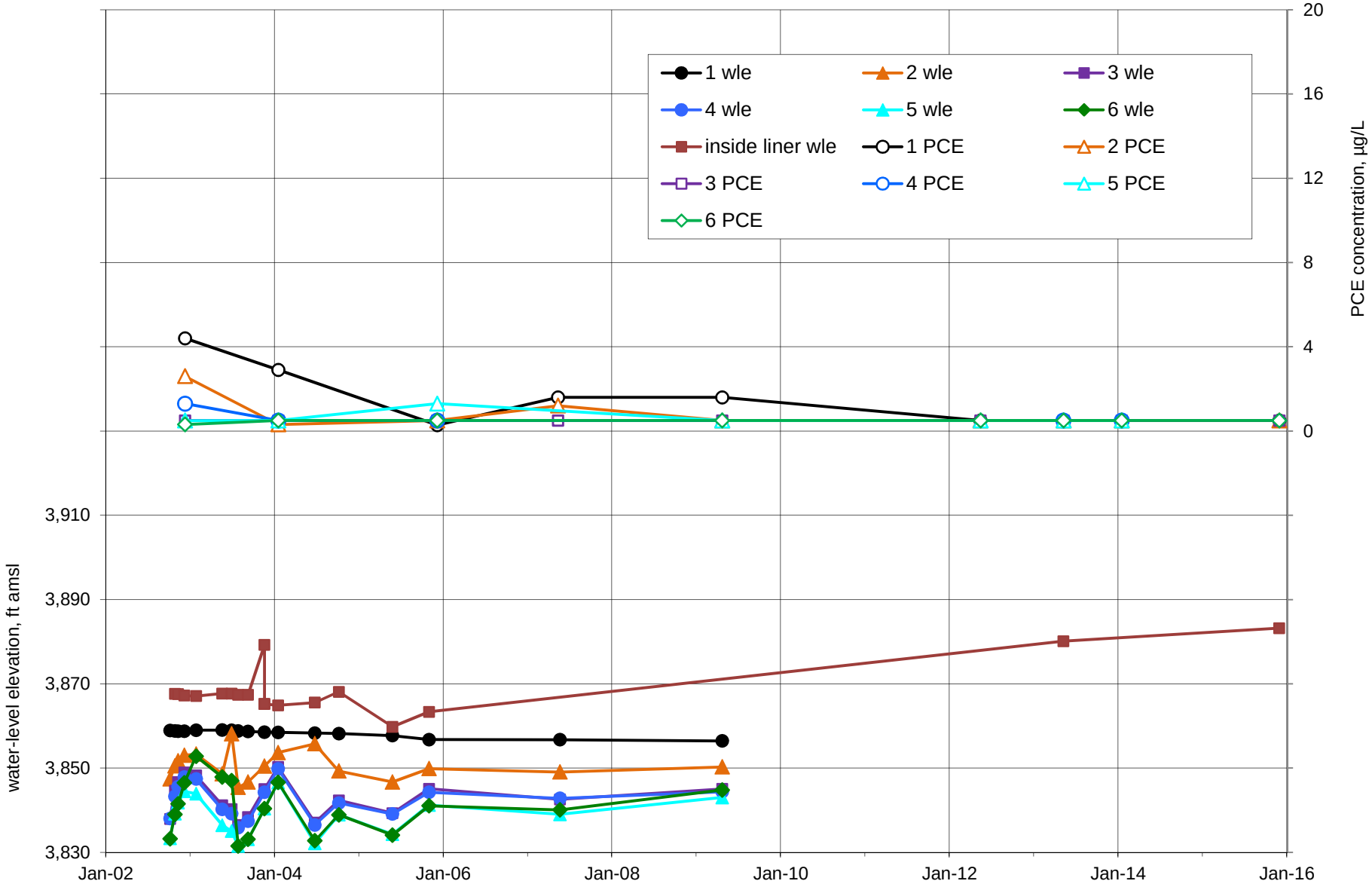

Figure B2. Graph of GWMW03 (Ports 1-6 and inside liner) observed water levels and PCE concentrations.

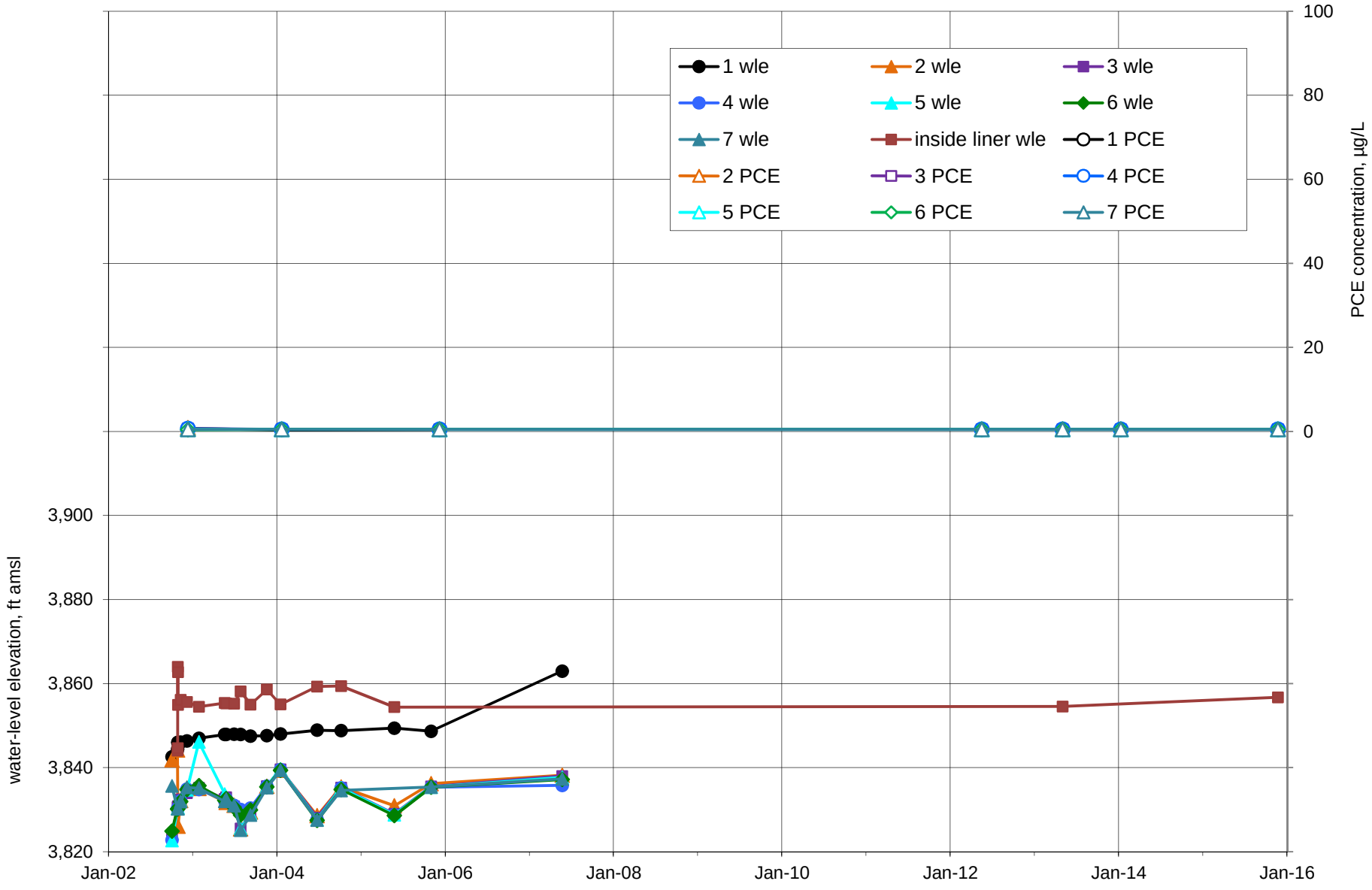

Figure B3. Graph of GWMW08 (Ports 1-7 and inside liner) observed water levels and PCE concentrations.

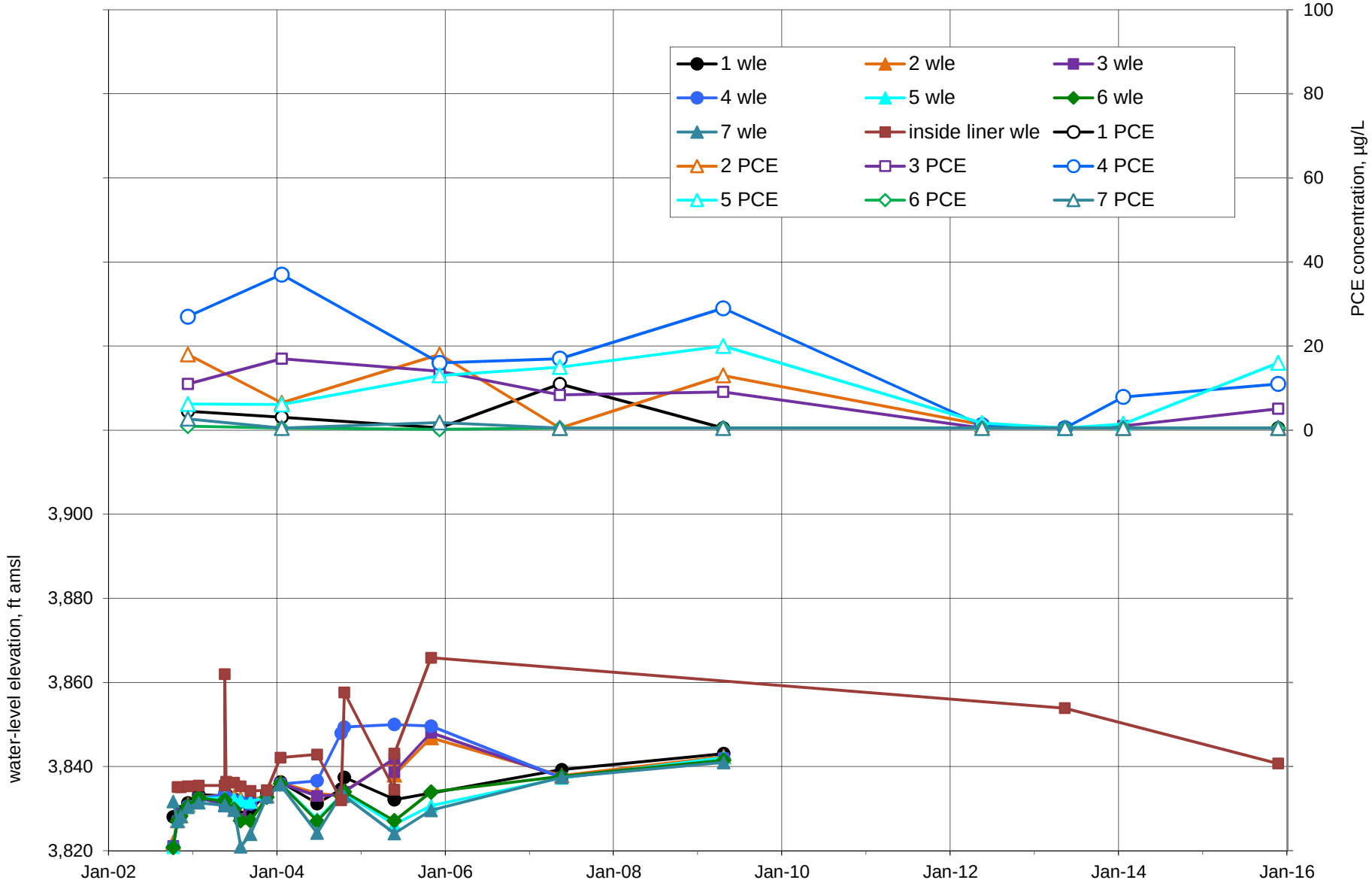

Figure B4. Graph of GWMW09 (Ports 1-7 and inside liner) observed water levels and PCE concentrations.

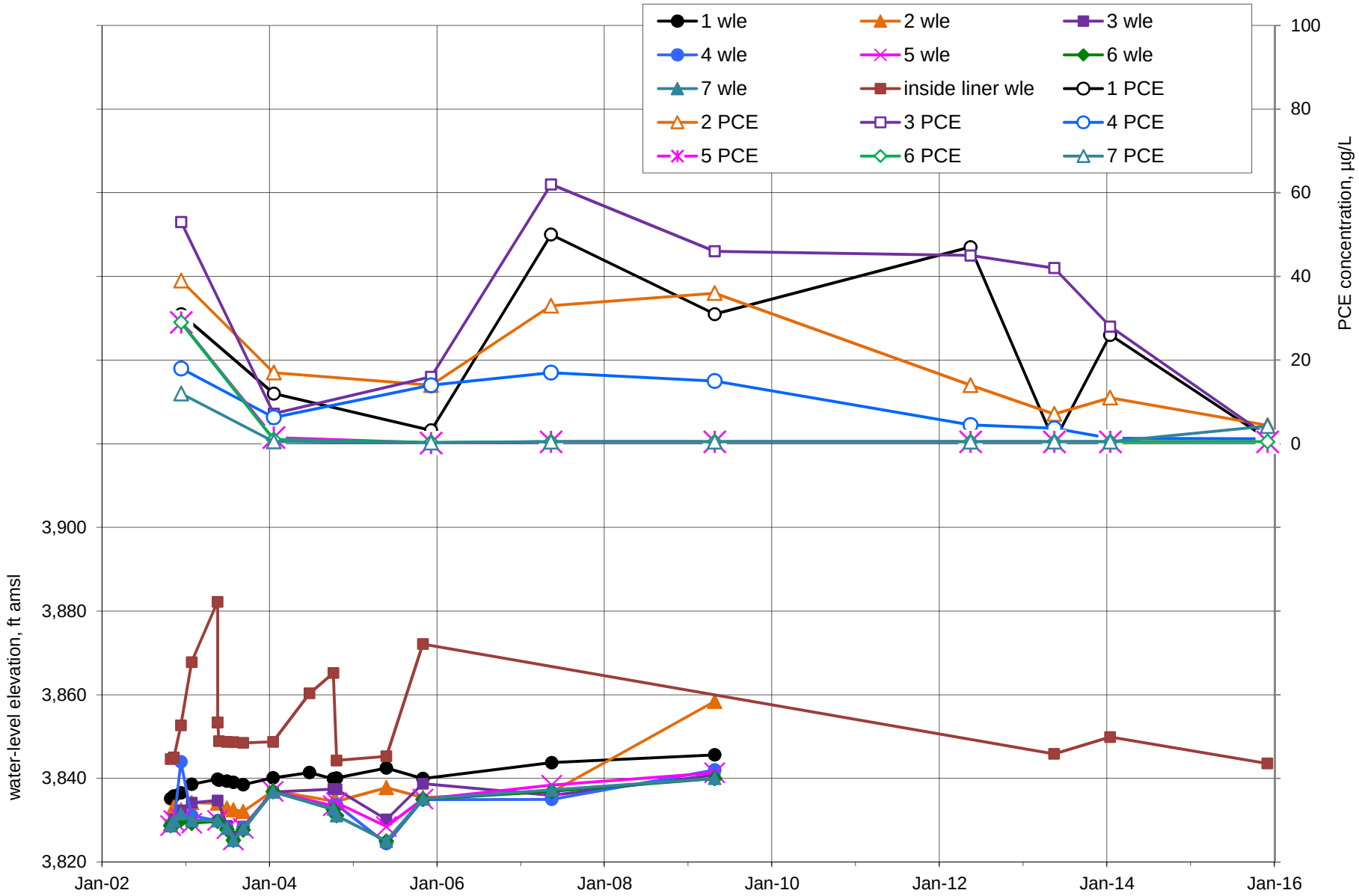

Figure B5. Graph of GWMW10 (Ports 1-7 and inside liner) observed water levels and PCE concentrations.

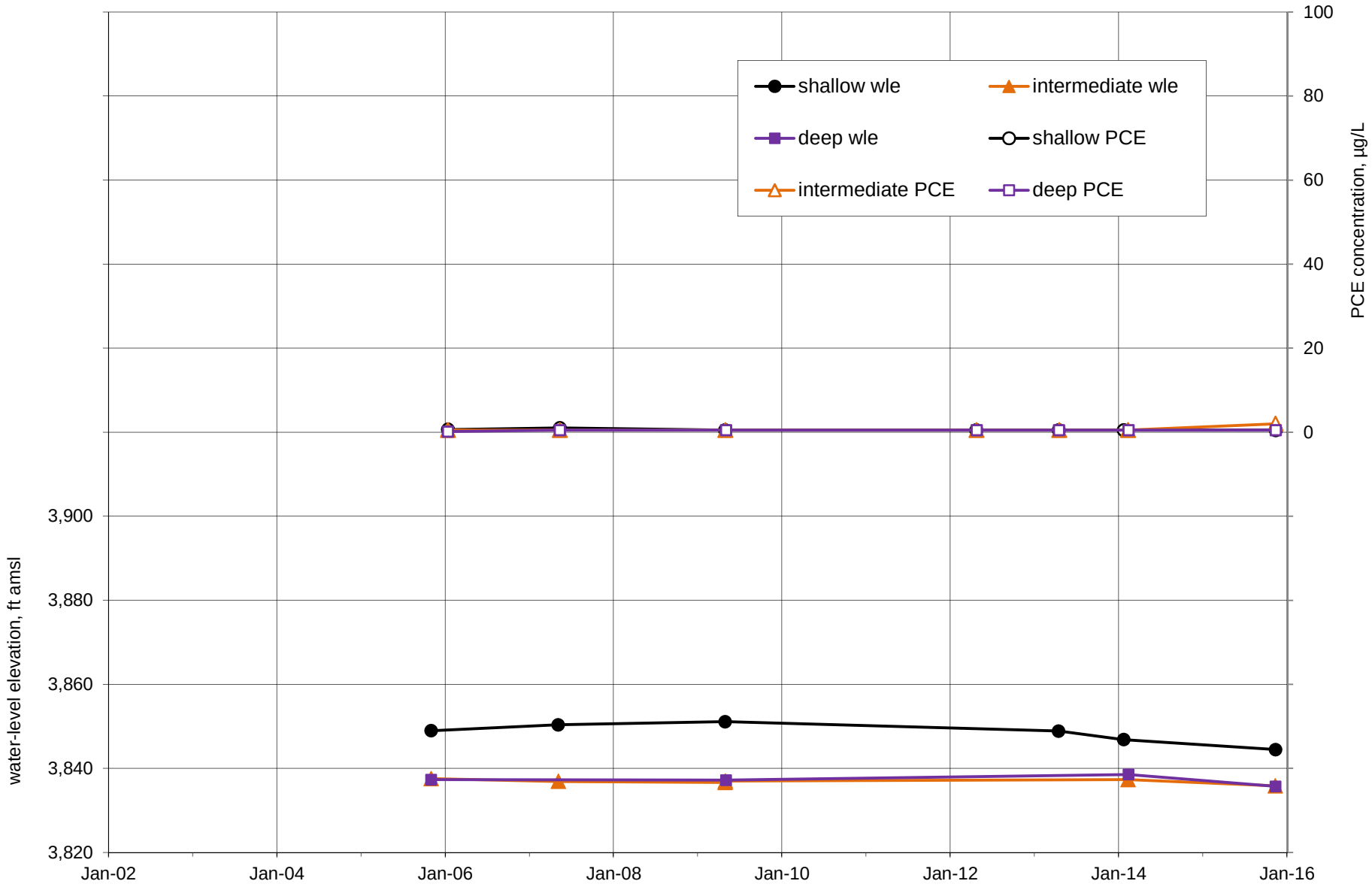

Figure B6. Graph of GWMW11 (shallow, intermediate, and deep) observed water levels and PCE concentrations.

Figure B7. Graph of GWMW15 (shallow, intermediate, and deep) observed water levels and PCE concentrrations.

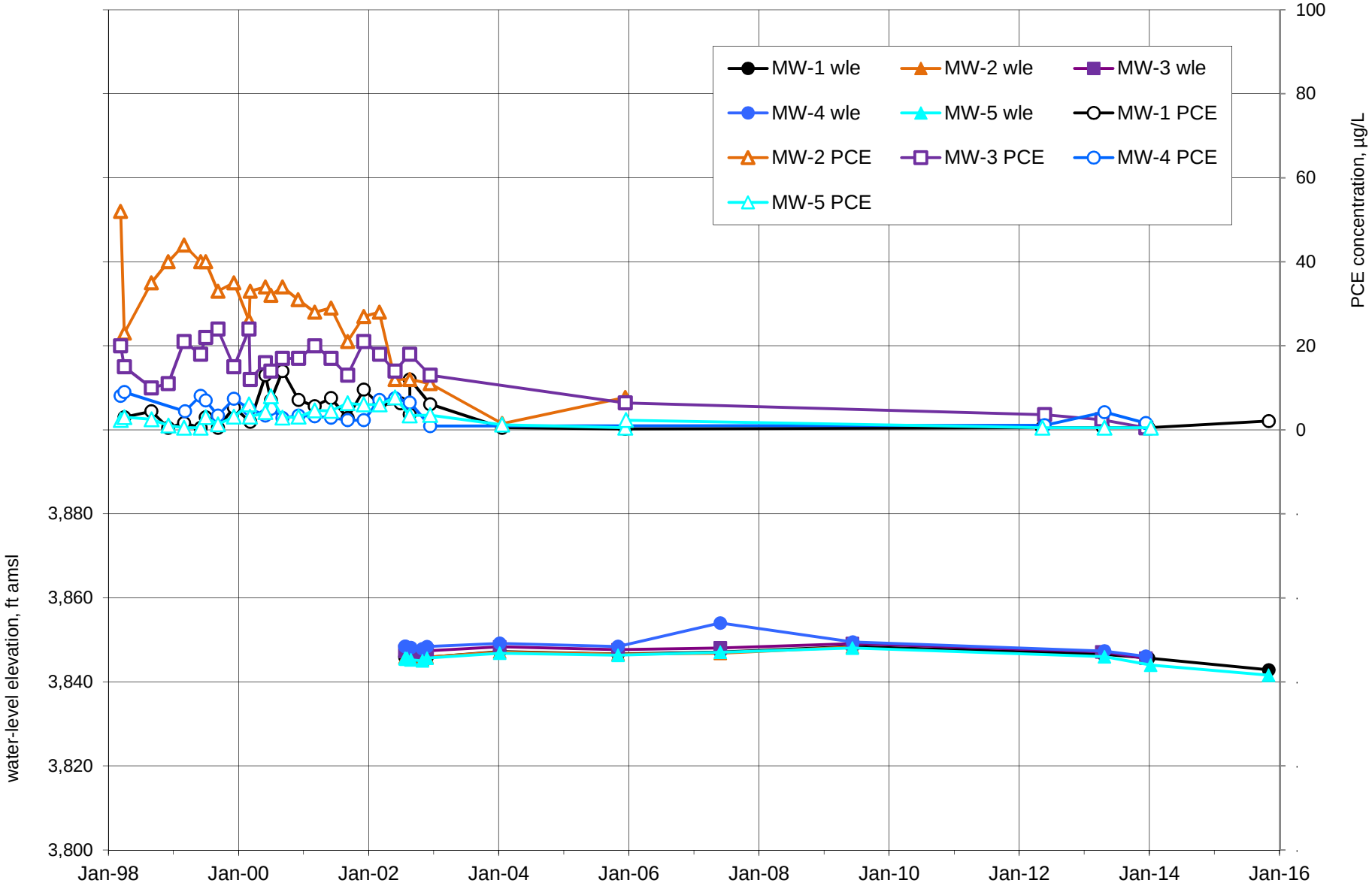

Figure B8. Graph of MW-1 through MW-5 observed water levels and PCE concentrations.

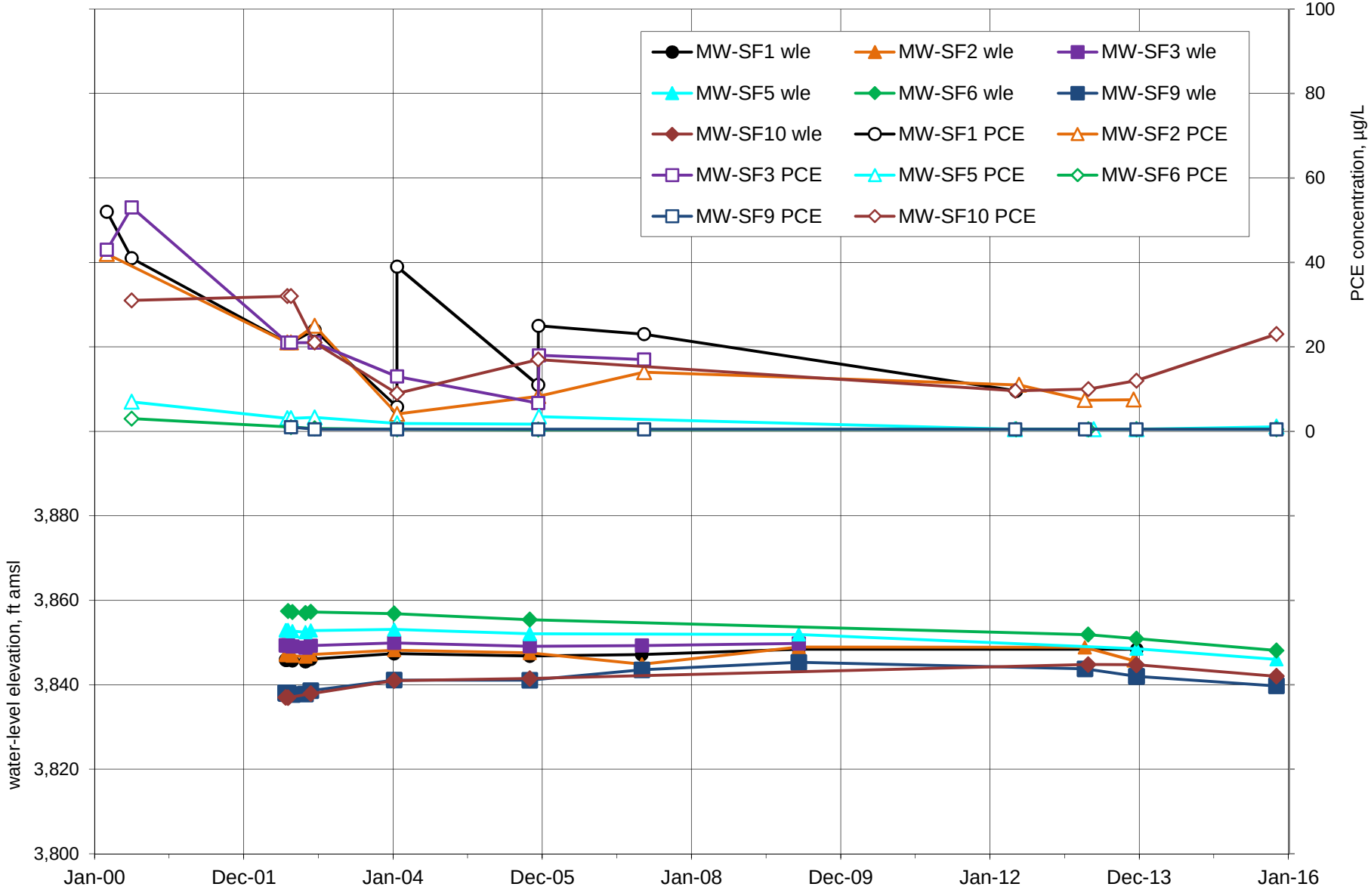

Figure B9. Graph of MW-SF1 through MW-SF10 observed water levels and PCE concentrations.

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Appendix C.

Graphs showing observed and model simulated PCE concentrations

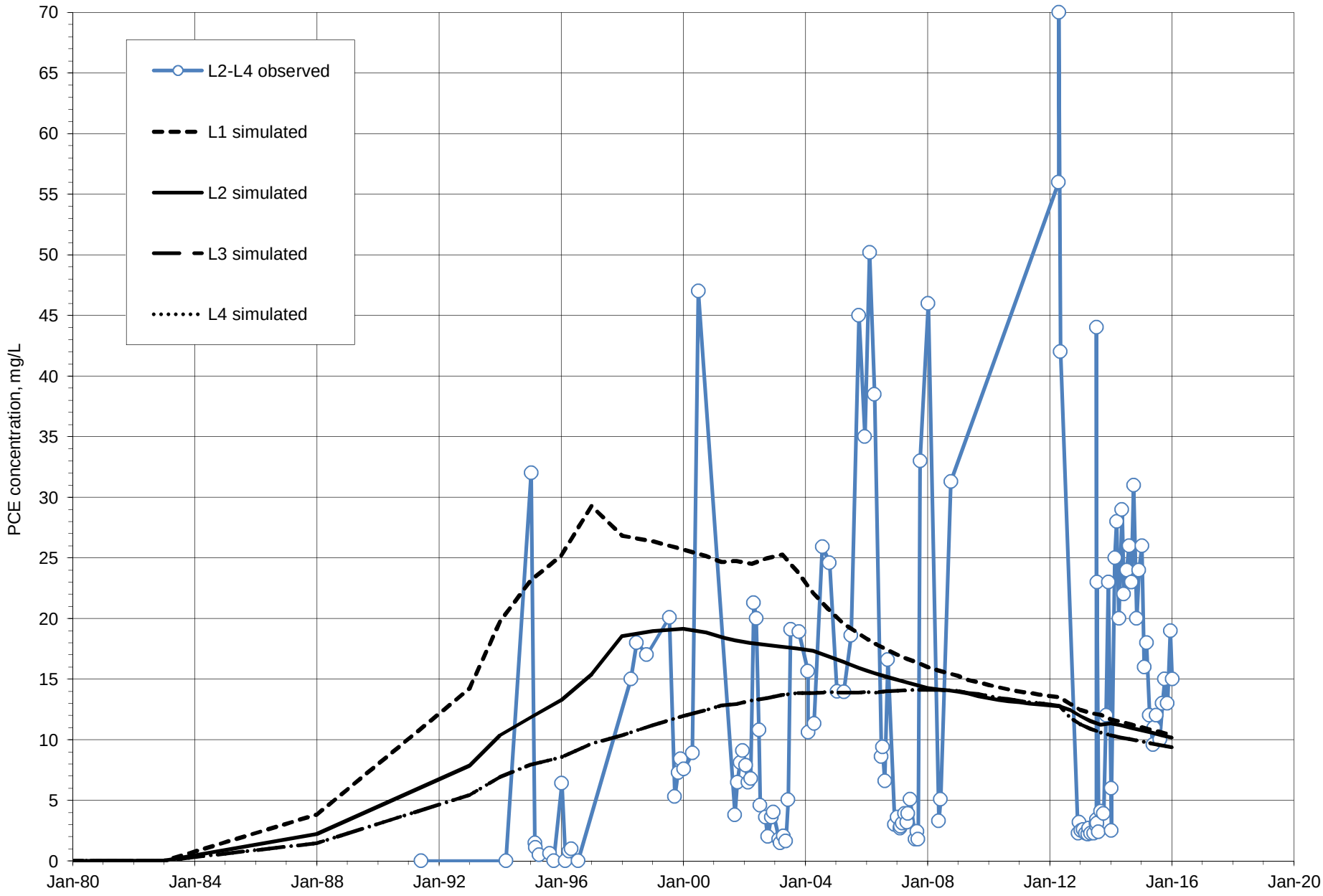

Figure C1. Graph of CLC Well 18 observed data and model-simulated PCE concentrations.

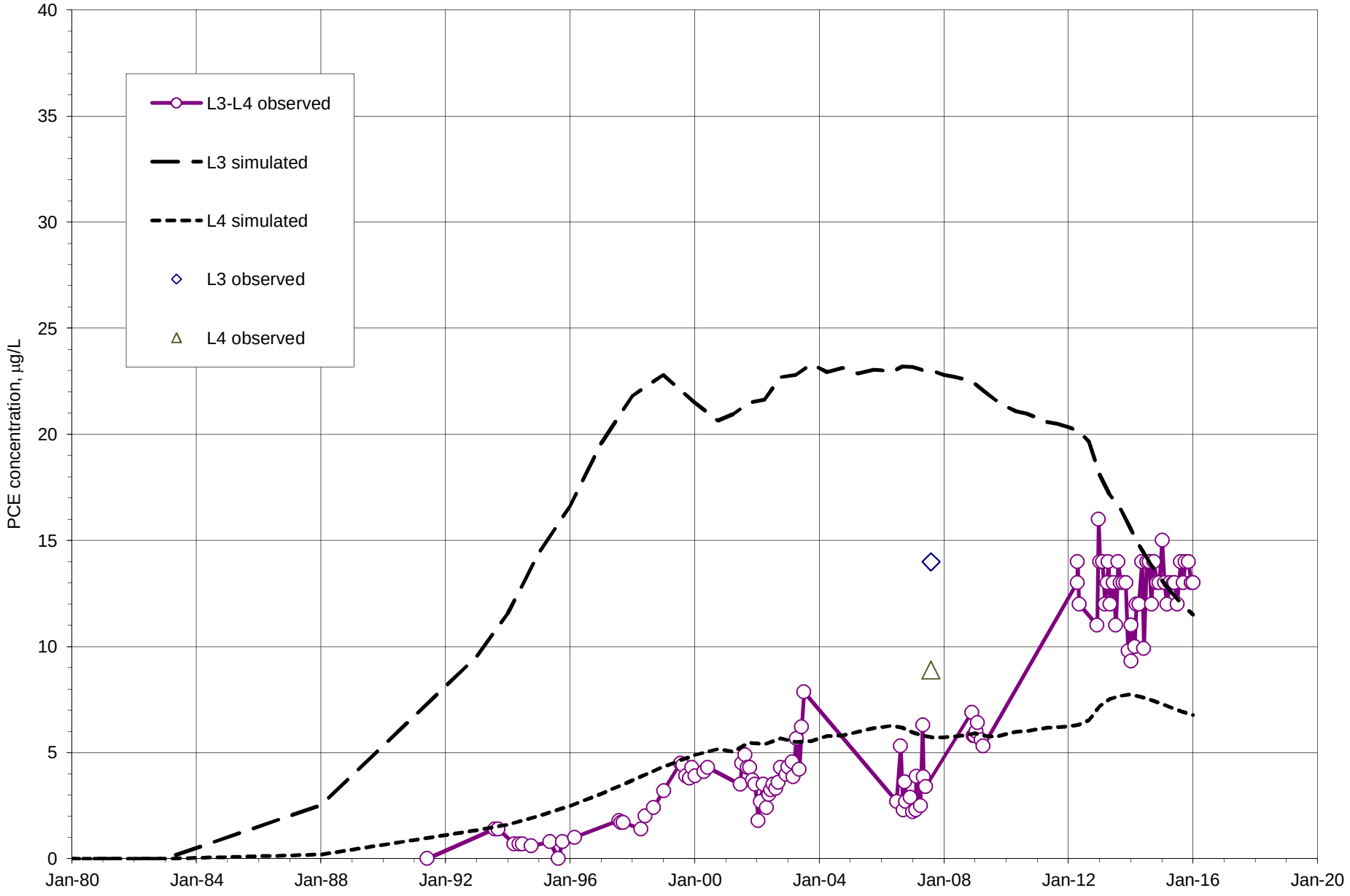

Figure C2. Graph of CLC Well 27 observed data and model-simulated PCE concentrations.

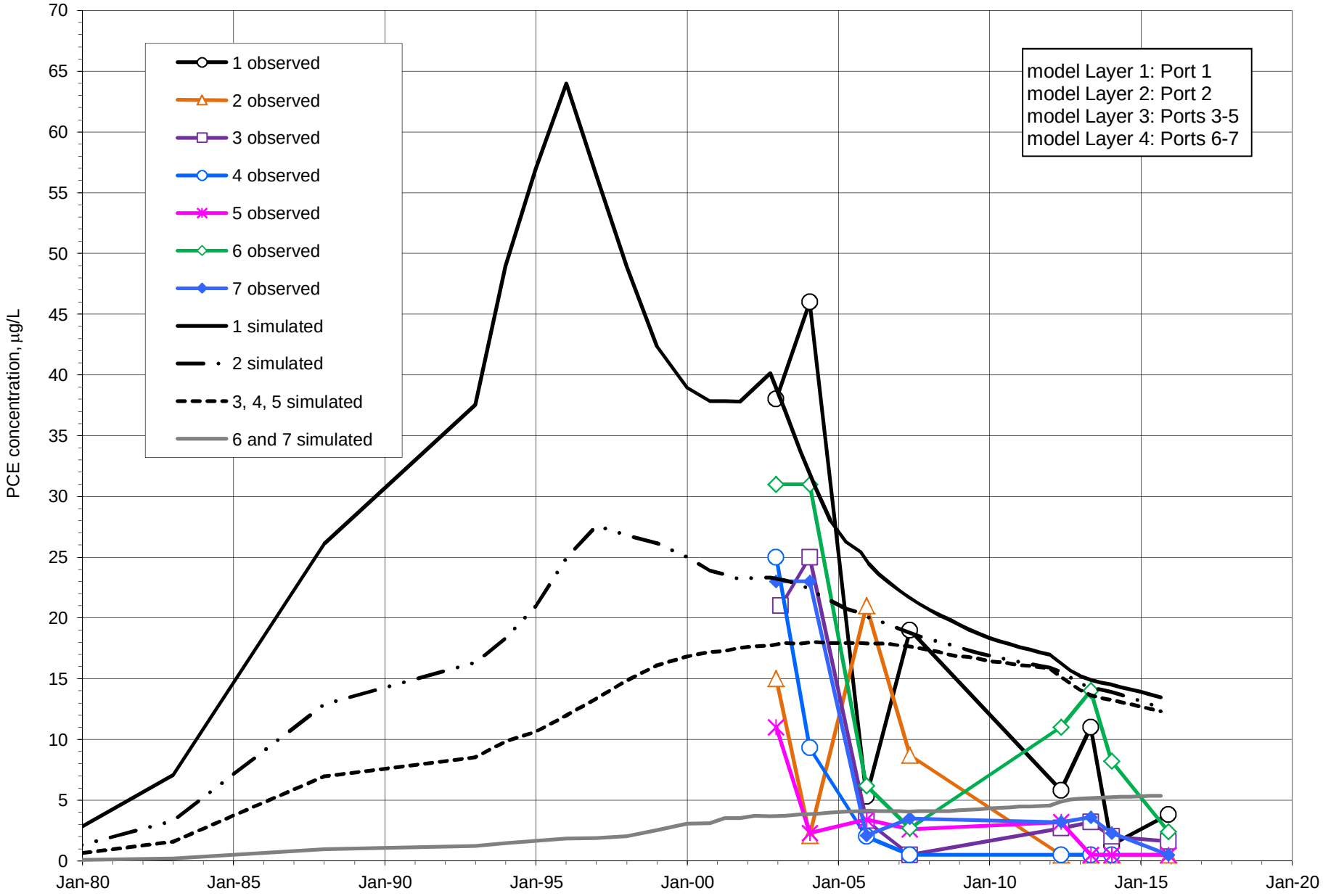

Figure C3. Graph of GWMW01 (Ports 1-7) observed data and model-simulated PCE concentrations.

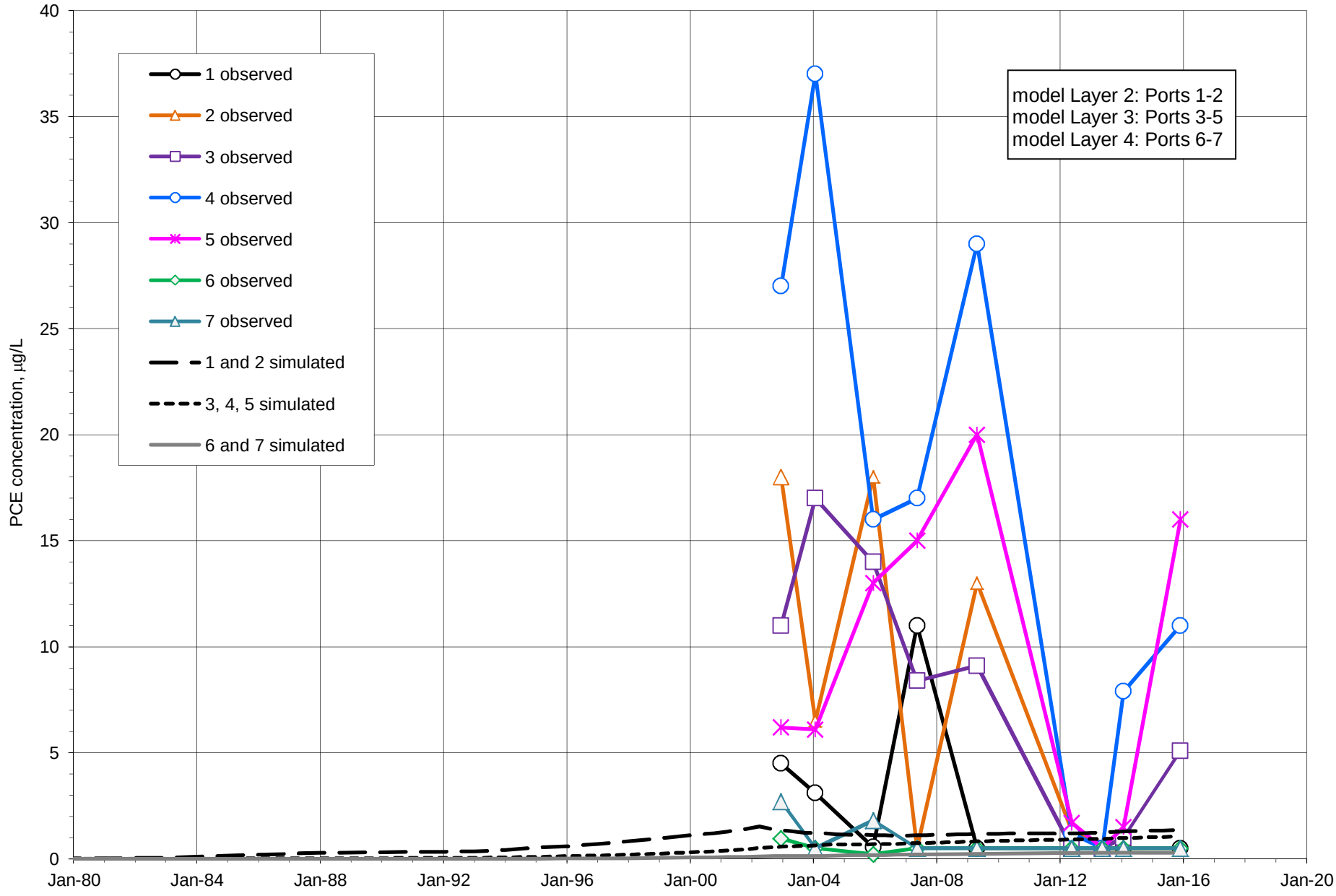

Figure C4. Graph of GWMW09 (Ports 1-7) observed data and model-simulated PCE concentrations.

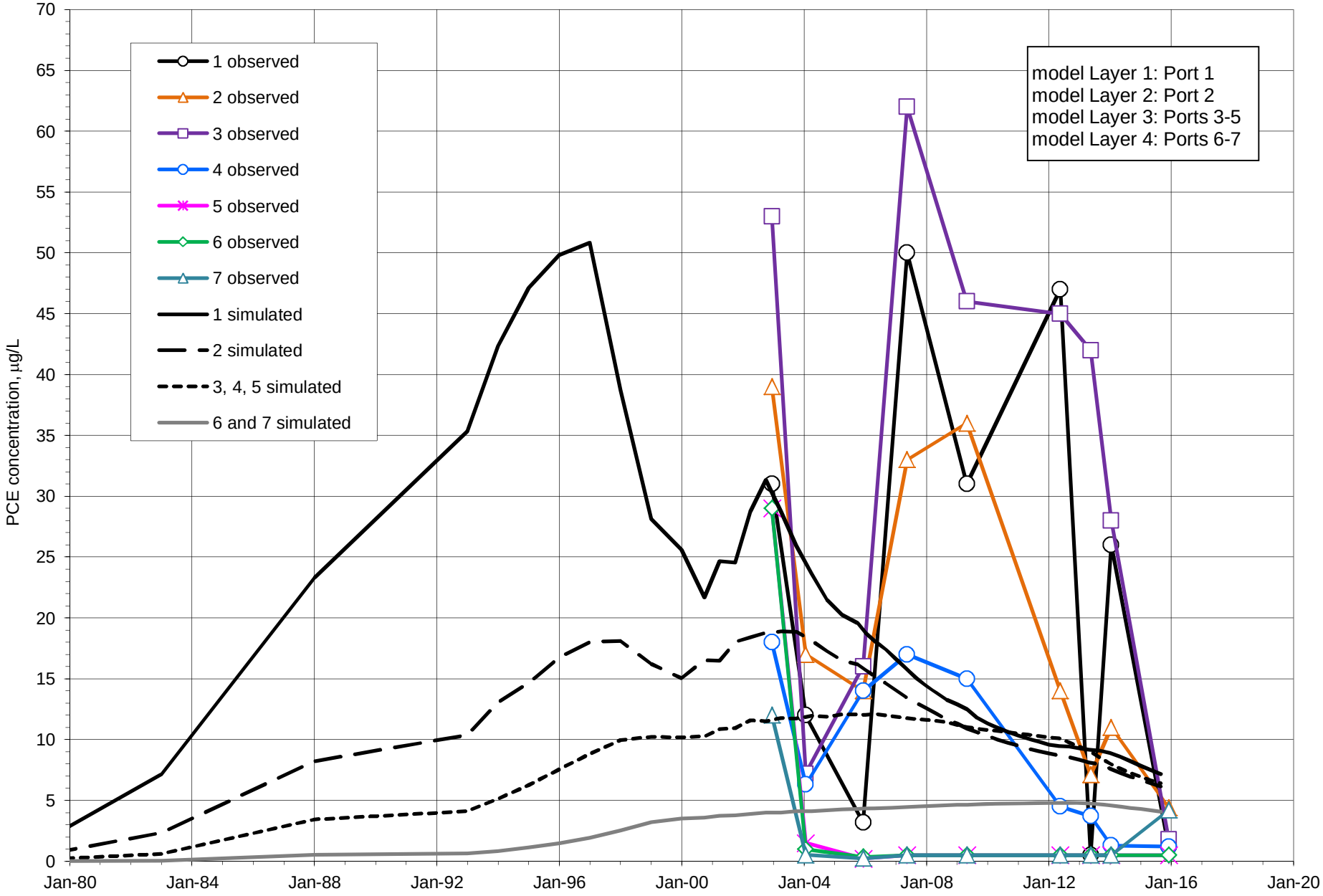

Figure C5. Graph of GWMW10 (Ports 1-7) observed data and model-simulated PCE concentrations.

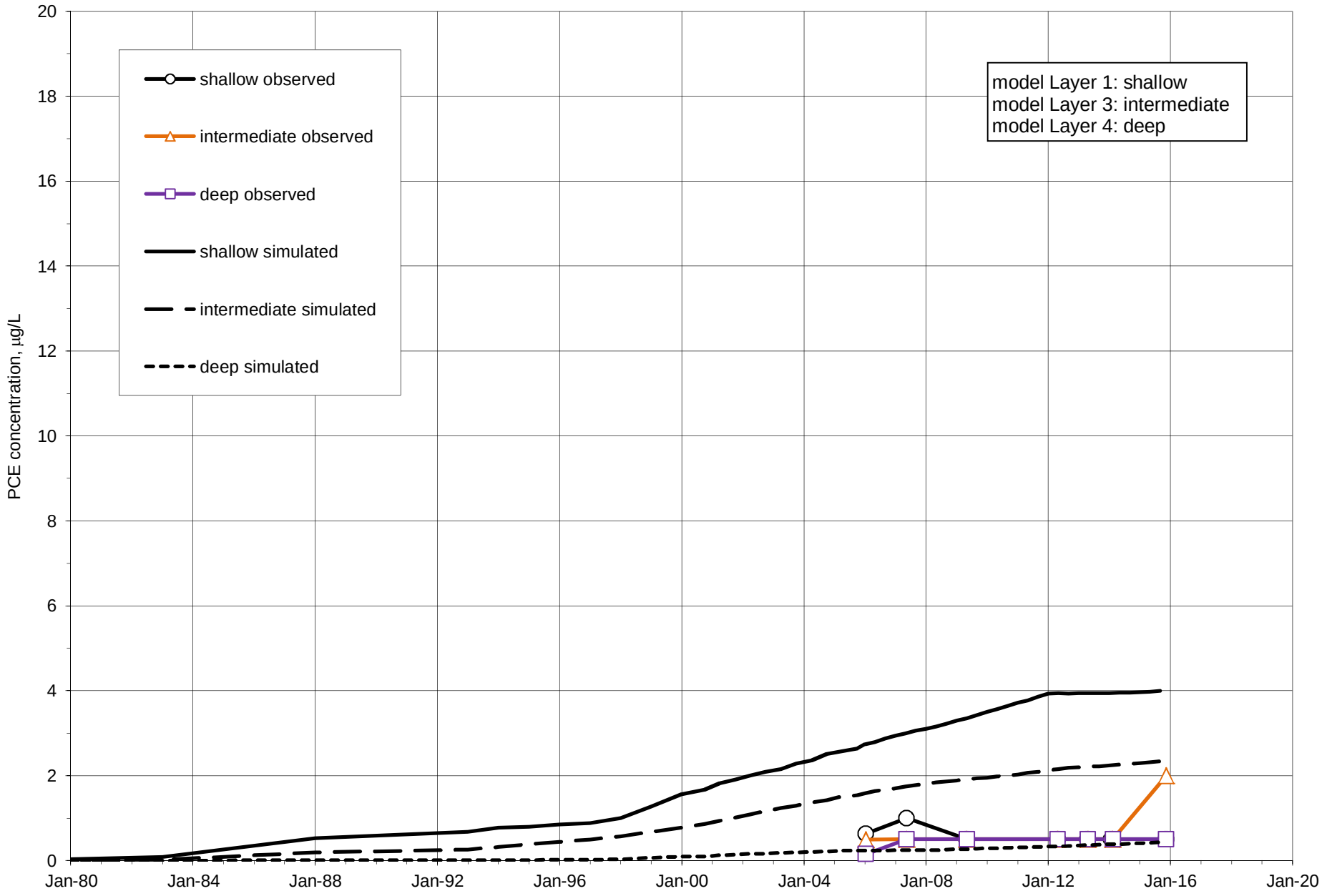

Figure C6. Graph of GWMW11 (shallow, intermediate, and deep) observed data and model-simulated PCE concentrations.

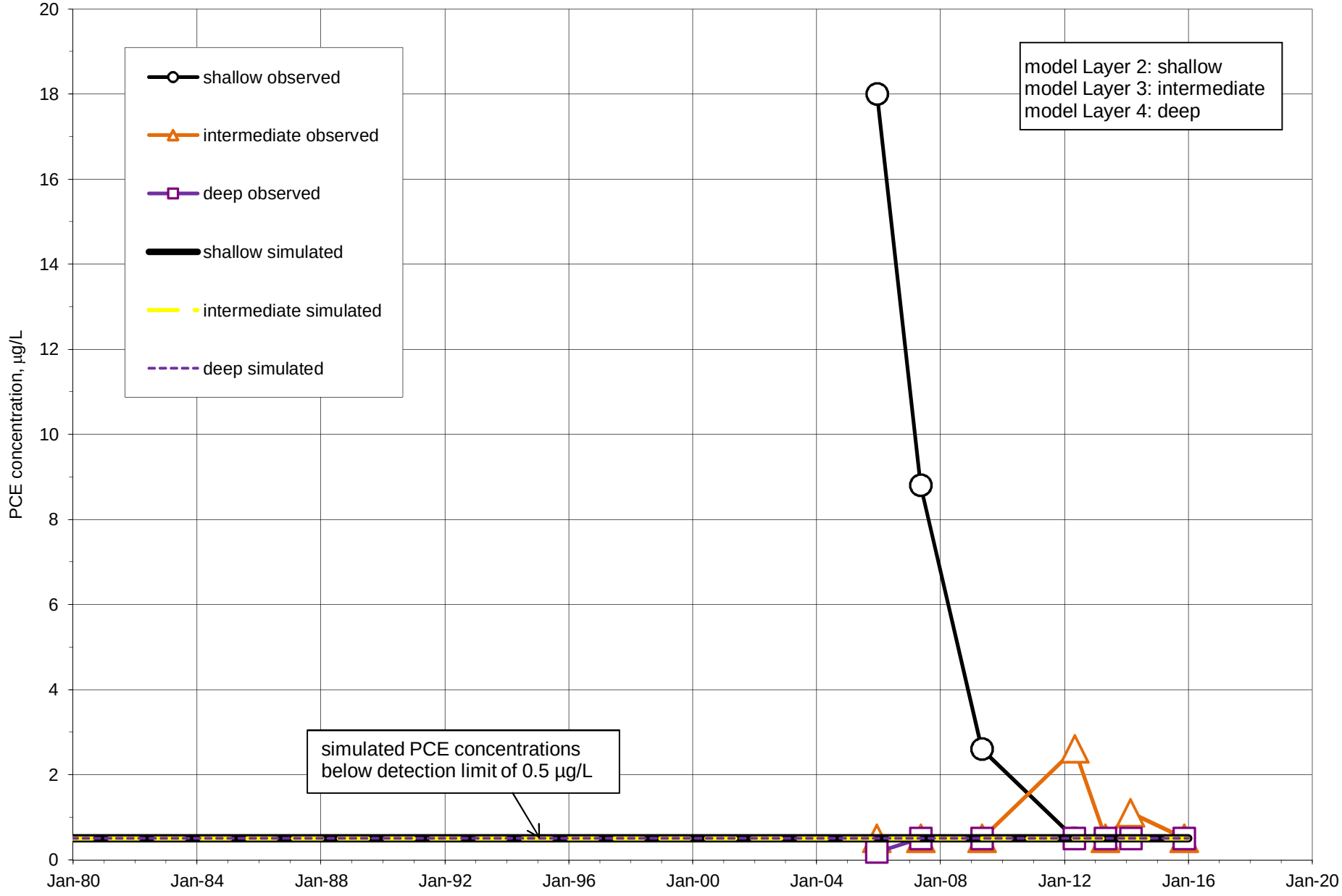

Figure C7. Graph of GWMW15 (shallow, intermediate, and deep) observed data and model-simulated PCE concentrations.

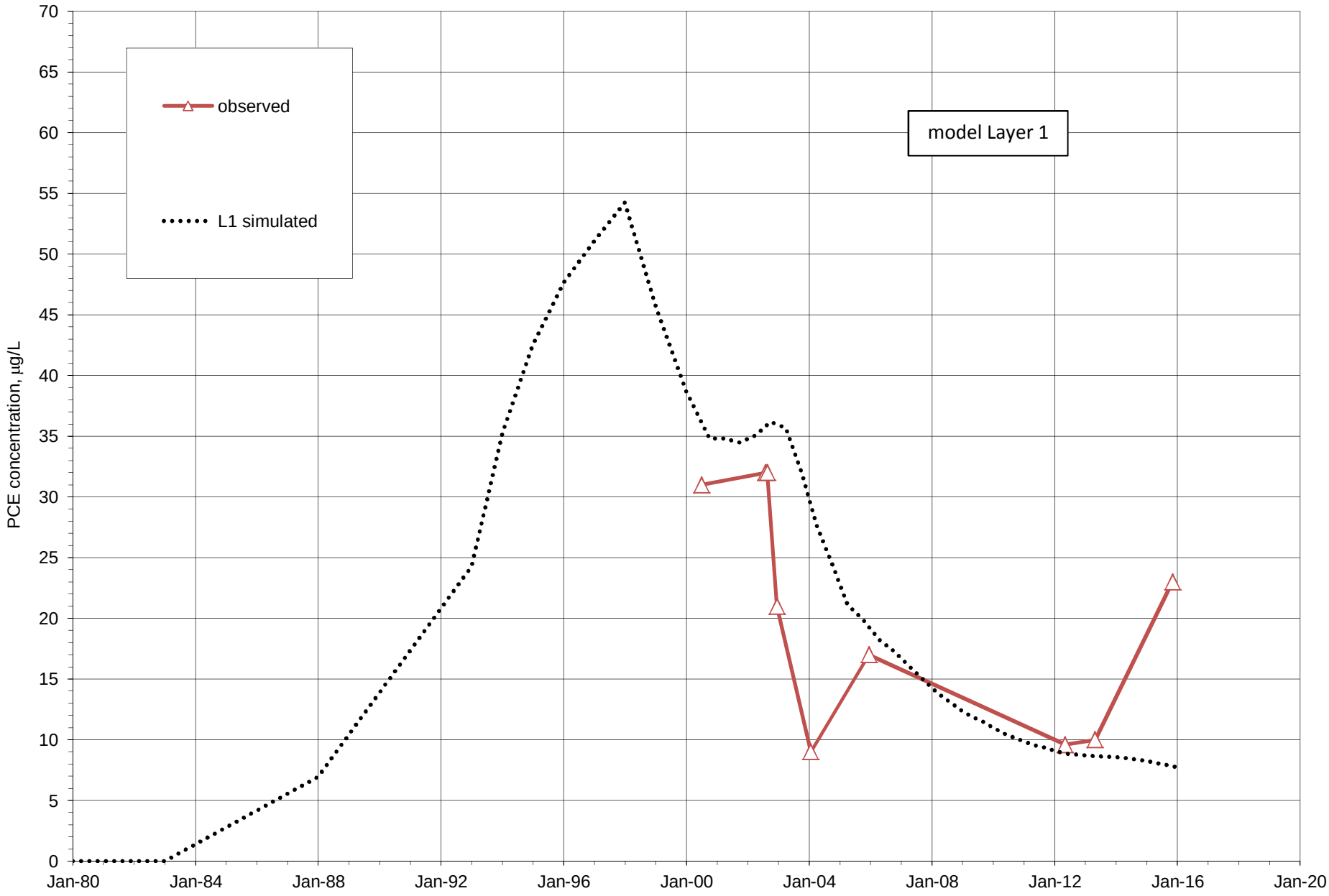

Figure C8. Graph of MW-SF10 observed data and model-simulated PCE concentrations.