District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

ENTERED

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: WESTERN REFINING	Contact: Beck Larsen
Address: I-40 / EXIT 39, JAMESTOWN,NM 87347	Telephone No.(505) 722-0258
Facility Name: WESTERN REFINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15 N	15 W					MCKINLEY

Latitude__35° 029' 024"__ **Longitude**__108° 024' 024"__

NATURE OF RELEASE

Type of Release: Dirty Sewer Water	Volume of Release- Oil-14 bbls	Volume Recovered: Oil- 14 bbls
Source of Release: Secondary Baker Frac Tanks at WWTP	Date and Hour of Occurrence 8/5/14 @ 1405 hrs	Date and Hour of Discovery 8/5/14 @ 1405 hrs
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD (C. Chavez) / NMED HWB (Kristen Van Horn)	
By Whom? Beck Larsen	Date and Hour: 8/6/14 C. Chavez @1335 hrs / K. Van Horn @ 1345 hrs	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.* Oily Sewer Water from the Secondary Baker Frac Tank at the WWTP overflowed to the ground and along a conveyance ditch. Cleanup operations started promptly using a vacuum truck to remove standing liquids from the soil and conveyance ditch. Initial soil samples were collected and submitted to the laboratory for analysis in order to make a proper determination of the extent of penetration of the oil and to determine the amount of cleanup that is required. Analytical results indicated that this material was TPH soil and it was characteristically RCRA non-hazardous.

Describe Area Affected and Cleanup Action Taken.* Approximately18 cubic yards of soil was excavated from the contaminated area. Five (5) initial soil samples (B-1, B-2, B-3, B-4, and B-5) (lab# 1408348) were collected along the conveyance ditch in the area of contamination and submitted to the laboratory for analysis which gave a preliminary findings. A secondary soil was collected also (B-6, B-7, B-8, B-9, B-10, and B-11) (lab # 1408F15) that was more comprehensive in scope. These findings indicated that only one area (B-7) reflected a higher level of TPH, DRO, and MRO. Additional soils was removed for sample point (B-7) and resubmitted under sample points (C-12 and C-13) (lab # 1409D84). A composite sample was collected for Bin # 2051 (lab # 1409350) for the material that is to be shipped offsite. A Waste Determination indicated that this material is RCRA Non-hazardous TPH soil (PCS, Petroleum Contaminated Soil) and was shipped to a RCRA Non-hazardous Subtitle D Landfill for proper disposal on November 3, 2014 (manifest # D68606) Refer to the attached analysis for further detail.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Beck Larsen:	Approved by Environmental Specialist:	
Title: Environmental Engineer	Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:	Attached ☐
Date: 2/25/2015 Phone: (505) 722-0258		

VanHorn, Kristen, NMENV

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Tuesday, February 24, 2015 10:08 AM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Riege, Ed
Subject: C141 FINAL SEWER OVERFLOW FROM 08-05-15 (Part 1 of 2)
Attachments: C141 FINAL Sewer Water Release at WWTP.pdf; Analysis Comparison.pdf; Sample Point Map.pdf; Manifest D6868606 110314.pdf; GM 16342 110414.pdf

Dear Carl and Christen,

This following is the Final Report for the Sewer Overflow that occurred on august 5, 2014. (Part 1 of 2). The remainder of the analysis will be attached as a separate e-mail.

Regards,

Beck Larsen
Environmental Engineer
Western Refining Southwest (Gallup Refinery)
92 Giant Crossing Road - New Mailing Address
Gallup, NM 87301
Office: (505) 722-0258
cell: (505) 862-1749

VanHorn, Kristen, NMENV

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Tuesday, February 24, 2015 10:20 AM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Riege, Ed
Subject: C141 Sewer Overflow of 8-05-14 (Part 3 of 3)
Attachments: 201502240944.pdf

Dear Carl and Kristen,
Here is the final analysis for as attachment to the Sewer Overflow that occurred (Part 3 of 3).
Regards,

Beck Larsen
Environmental Engineer
Western Refining Southwest (Gallup Refinery)
92 Giant Crossing Road - New Mailing Address
Gallup, NM 87301
Office: (505) 722-0258
cell: (505) 862-1749

VanHorn, Kristen, NMENV

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Tuesday, February 24, 2015 12:09 PM
To: VanHorn, Kristen, NMENV; Chavez, Carl J, EMNRD
Cc: Riege, Ed
Subject: RE: C141 FINAL SEWER OVERFLOW FROM 08-05-15 (Part 1 of 2)

Kristen,
I just sent you the analysis in four separate e-mail. Samples were collected using a stainless spade. The sample depth was about 3 to 6 inches. Samples were placed into glass jars, put into a refrigerator until shipped offsite to the laboratory for analysis. Approximately one to two inches of soil was excavated from the contaminated area using shovels and a backhoe.

From: VanHorn, Kristen, NMENV [mailto:Kristen.VanHorn@state.nm.us]
Sent: Tuesday, February 24, 2015 10:50 AM
To: Larsen, Thurman; Chavez, Carl J, EMNRD
Cc: Riege, Ed
Subject: RE: C141 FINAL SEWER OVERFLOW FROM 08-05-15 (Part 1 of 2)

Thank you, Beck. Both emails came through.

Is it possible to provide a short description of how the samples were collected and approximate depth of sample collection and also approximate depth of soil removal for our records?

Thanks,
Kristen

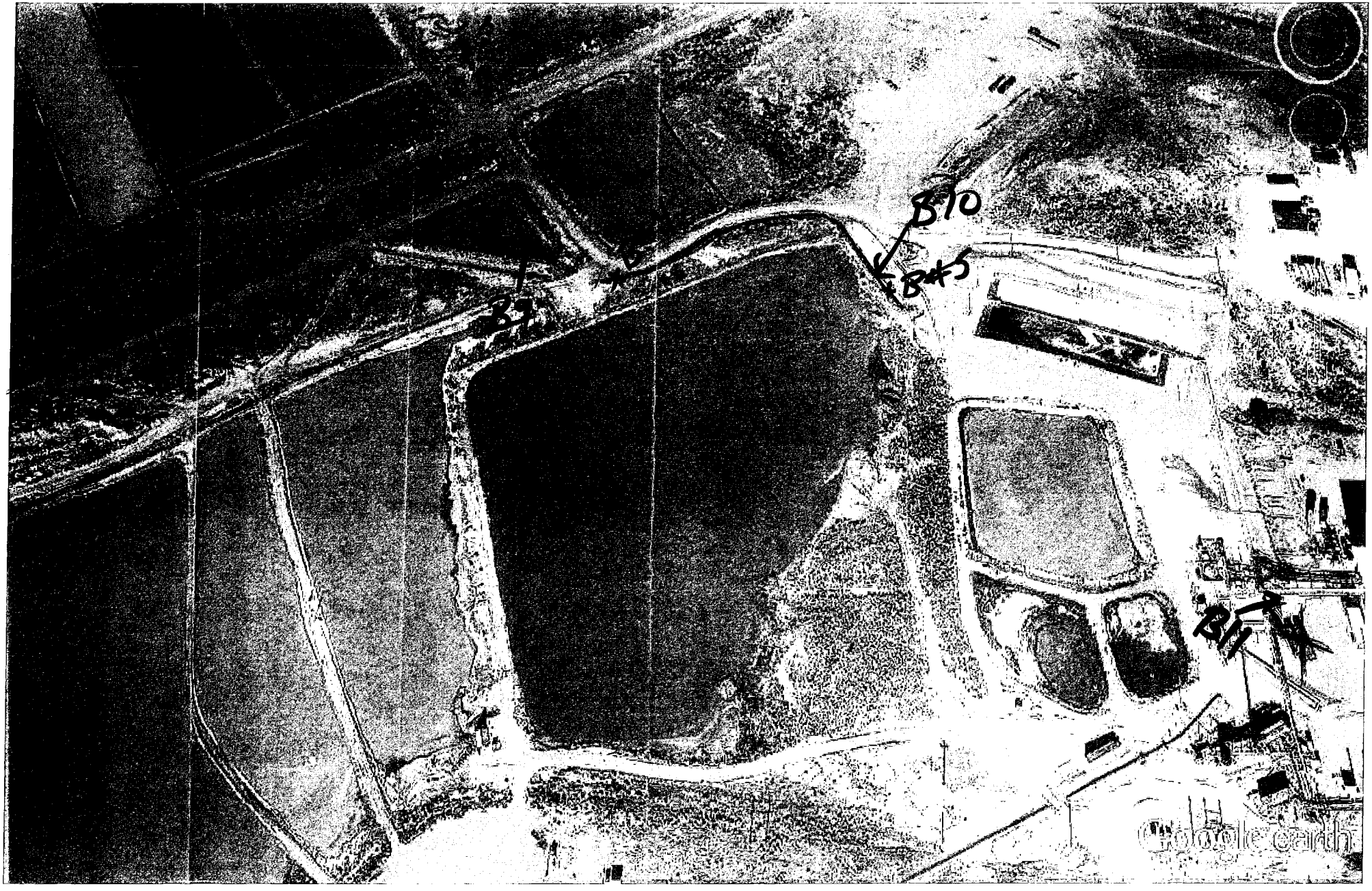
From: Larsen, Thurman [mailto:Thurman.Larsen@wnr.com]
Sent: Tuesday, February 24, 2015 10:08 AM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Riege, Ed
Subject: C141 FINAL SEWER OVERFLOW FROM 08-05-15 (Part 1 of 2)

Dear Carl and Christen,

This following is the Final Report for the Sewer Overflow that occurred on august 5, 2014. (Part 1 of 2). The remainder of the analysis will be attached as a separate e-mail.

Regards,

Beck Larsen
Environmental Engineer
Western Refining Southwest (Gallup Refinery)
92 Giant Crossing Road - New Mailing Address
Gallup, NM 87301
Office: (505) 722-0258
cell: (505) 862-1749


B10
B#5
B9
B11
Google earth

SEWER WATER SPILL ANALYSIS COMPARISON
(BAKER TANK OVERFLOW @ WWTP)

Incident Date: 8/5/2014
Qty Released: 14 bbls

						Analyte								
SAMPLING	**Sampling Date:**	**DRO**	**MRO**	**GRO**	**TPH**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylene**	**pH**	**Ign**	**CN**	**S**	**Cl**
Initial Soil Sampling:														
Lab #: 1408348	8/5/2014													
B-1				ND						8.7	Neg	ND	ND	
B-2				ND						8.74	Neg	ND	37.4	
B-3				50				0.14	1.8	9.18	Neg	ND	36.2	
B-4				ND						8.64	Neg	ND	30.2	
B-5				ND					0.35	9.18	Neg	0.214	ND	
Conf Sampling	827/2014													
Lab #: 1408F15														
B-6		820	400	ND	350	ND	ND	ND	ND	2>pH<12.5	Neg	ND	ND	260
B-7		6300	2000	ND	9400	ND	ND	ND	ND	2>pH<12.5	Neg	ND	37.4	84
B-8		50	ND	ND	73	ND	ND	ND	ND	2>pH<12.5	Neg	ND	36.2	190
B-9		14	ND	ND	24	ND	ND	ND	ND	2>pH<12.5	Neg	ND	30.2	110
B-10		ND	ND	ND	140	ND	ND	ND	ND	2>pH<12.5	Neg	0.214	ND	ND
B-11		ND	ND	ND	27	ND	ND	ND	ND	2>pH<12.5	Neg	ND	ND	ND
Conf Sampling	9/25/2014													
Lab #: 1409D84														
C-12		34		ND	160	ND	ND	ND	ND	9.31	Neg	ND	ND	1600
C-13		ND		ND	92	ND	ND	ND	ND	9.15	Neg	ND	ND	230
Conf Sampling (Bin # 2051)	10/7/2014													
Lab #: 1409350		400	ND	ND	940	ND	ND	ND	ND	8.75	Neg	ND	ND	94

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

September 08, 2014

Beck Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: WWTP Baker Tank Overflow OrderNo.: 1408F15

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/28/2014 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 **1408F15**
Date Reported: **9/8/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-001 **Matrix:** SOIL

Client Sample ID: B # 6 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:00:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	820	9.8		mg/Kg	1	9/3/2014 8:58:52 AM	15031
Motor Oil Range Organics (MRO)	400	49		mg/Kg	1	9/3/2014 8:58:52 AM	15031
Surr: DNOP	101	57.9-140		%REC	1	9/3/2014 8:58:52 AM	15031
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	500		mg/Kg	100	9/2/2014 1:10:54 PM	15040
Surr: BFB	93.6	80-120		%REC	100	9/2/2014 1:10:54 PM	15040
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/2/2014 1:10:54 PM	15040
Toluene	ND	0.050		mg/Kg	1	9/2/2014 1:10:54 PM	15040
Ethylbenzene	ND	0.050		mg/Kg	1	9/2/2014 1:10:54 PM	15040
Xylenes, Total	ND	0.10		mg/Kg	1	9/2/2014 1:10:54 PM	15040
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	9/2/2014 1:10:54 PM	15040
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	260	30		mg/Kg	20	9/3/2014 1:35:22 PM	15086
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/4/2014 4:16:56 PM	15110
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	9/4/2014 10:02:24 AM	15099
Barium	ND	100		mg/L	1	9/4/2014 10:02:24 AM	15099
Cadmium	ND	1.0		mg/L	1	9/4/2014 10:02:24 AM	15099
Chromium	ND	5.0		mg/L	1	9/4/2014 10:02:24 AM	15099
Lead	ND	5.0		mg/L	1	9/4/2014 10:02:24 AM	15099
Selenium	ND	1.0		mg/L	1	9/4/2014 10:02:24 AM	15099
Silver	ND	5.0		mg/L	1	9/4/2014 10:02:24 AM	15099
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/4/2014 11:21:26 AM	15077
3+4-Methylphenol	ND	200		mg/L	1	9/4/2014 11:21:26 AM	15077
Phenol	ND	200		mg/L	1	9/4/2014 11:21:26 AM	15077
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/4/2014 11:21:26 AM	15077
Hexachlorobenzene	ND	0.13		mg/L	1	9/4/2014 11:21:26 AM	15077
Hexachlorobutadiene	ND	0.50		mg/L	1	9/4/2014 11:21:26 AM	15077
Hexachloroethane	ND	3.0		mg/L	1	9/4/2014 11:21:26 AM	15077
Nitrobenzene	ND	2.0		mg/L	1	9/4/2014 11:21:26 AM	15077
Pentachlorophenol	ND	100		mg/L	1	9/4/2014 11:21:26 AM	15077
Pyridine	ND	5.0		mg/L	1	9/4/2014 11:21:26 AM	15077
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/4/2014 11:21:26 AM	15077

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-001 **Matrix:** SOIL

Client Sample ID: B # 6 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:00:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/4/2014 11:21:26 AM	15077
Cresols, Total	ND	200		mg/L	1	9/4/2014 11:21:26 AM	15077
Surr: 2-Fluorophenol	68.8	25-105		%REC	1	9/4/2014 11:21:26 AM	15077
Surr: Phenol-d5	46.4	22.3-70.3		%REC	1	9/4/2014 11:21:26 AM	15077
Surr: 2,4,6-Tribromophenol	36.1	30.4-134		%REC	1	9/4/2014 11:21:26 AM	15077
Surr: Nitrobenzene-d5	87.1	54.8-128		%REC	1	9/4/2014 11:21:26 AM	15077
Surr: 2-Fluorobiphenyl	95.2	53.3-122		%REC	1	9/4/2014 11:21:26 AM	15077
Surr: 4-Terphenyl-d14	81.8	51.8-133		%REC	1	9/4/2014 11:21:26 AM	15077
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	9/3/2014 10:58:49 PM	15040
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	9/3/2014 10:58:49 PM	15040
2-Butanone	ND	200		ppm	10	9/3/2014 10:58:49 PM	15040
Carbon tetrachloride	ND	0.50		ppm	10	9/3/2014 10:58:49 PM	15040
Chlorobenzene	ND	100		ppm	10	9/3/2014 10:58:49 PM	15040
Chloroform	ND	6.0		ppm	10	9/3/2014 10:58:49 PM	15040
1,4-Dichlorobenzene	ND	7.5		ppm	10	9/3/2014 10:58:49 PM	15040
1,1-Dichloroethene	ND	0.70		ppm	10	9/3/2014 10:58:49 PM	15040
Tetrachloroethene (PCE)	ND	0.70		ppm	10	9/3/2014 10:58:49 PM	15040
Trichloroethene (TCE)	ND	0.50		ppm	10	9/3/2014 10:58:49 PM	15040
Vinyl chloride	ND	0.20		ppm	10	9/3/2014 10:58:49 PM	15040
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%REC	10	9/3/2014 10:58:49 PM	15040
Surr: 4-Bromofluorobenzene	82.1	70-130		%REC	10	9/3/2014 10:58:49 PM	15040
Surr: Dibromofluoromethane	84.8	70-130		%REC	10	9/3/2014 10:58:49 PM	15040
Surr: Toluene-d8	95.1	70-130		%REC	10	9/3/2014 10:58:49 PM	15040
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	350	20		mg/Kg	1	9/2/2014 12:00:00 PM	15036

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-002 **Matrix:** SOIL

Client Sample ID: B # 7 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:05:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	6300	100		mg/Kg	10	9/2/2014 4:23:14 PM	15031
Motor Oil Range Organics (MRO)	2000	500		mg/Kg	10	9/2/2014 4:23:14 PM	15031
Surr: DNOP	0	57.9-140	S	%REC	10	9/2/2014 4:23:14 PM	15031
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/2/2014 1:39:38 PM	15040
Surr: BFB	120	80-120		%REC	1	9/2/2014 1:39:38 PM	15040
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/2/2014 1:39:38 PM	15040
Toluene	ND	0.050		mg/Kg	1	9/2/2014 1:39:38 PM	15040
Ethylbenzene	ND	0.050		mg/Kg	1	9/2/2014 1:39:38 PM	15040
Xylenes, Total	ND	0.10		mg/Kg	1	9/2/2014 1:39:38 PM	15040
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	9/2/2014 1:39:38 PM	15040
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	84	30		mg/Kg	20	9/3/2014 1:47:46 PM	15086
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/4/2014 4:22:33 PM	15110
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	9/4/2014 10:03:40 AM	15099
Barium	ND	100		mg/L	1	9/4/2014 10:03:40 AM	15099
Cadmium	ND	1.0		mg/L	1	9/4/2014 10:03:40 AM	15099
Chromium	ND	5.0		mg/L	1	9/4/2014 10:03:40 AM	15099
Lead	ND	5.0		mg/L	1	9/4/2014 10:03:40 AM	15099
Selenium	ND	1.0		mg/L	1	9/4/2014 10:03:40 AM	15099
Silver	ND	5.0		mg/L	1	9/4/2014 10:03:40 AM	15099
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/4/2014 11:50:31 AM	15077
3+4-Methylphenol	ND	200		mg/L	1	9/4/2014 11:50:31 AM	15077
Phenol	ND	200		mg/L	1	9/4/2014 11:50:31 AM	15077
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/4/2014 11:50:31 AM	15077
Hexachlorobenzene	ND	0.13		mg/L	1	9/4/2014 11:50:31 AM	15077
Hexachlorobutadiene	ND	0.50		mg/L	1	9/4/2014 11:50:31 AM	15077
Hexachloroethane	ND	3.0		mg/L	1	9/4/2014 11:50:31 AM	15077
Nitrobenzene	ND	2.0		mg/L	1	9/4/2014 11:50:31 AM	15077
Pentachlorophenol	ND	100		mg/L	1	9/4/2014 11:50:31 AM	15077
Pyridine	ND	5.0		mg/L	1	9/4/2014 11:50:31 AM	15077
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/4/2014 11:50:31 AM	15077

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-002 **Matrix:** SOIL

Client Sample ID: B # 7 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:05:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/4/2014 11:50:31 AM	15077
Cresols, Total	ND	200		mg/L	1	9/4/2014 11:50:31 AM	15077
Surr: 2-Fluorophenol	25.0	25-105		%REC	1	9/4/2014 11:50:31 AM	15077
Surr: Phenol-d5	28.4	22.3-70.3		%REC	1	9/4/2014 11:50:31 AM	15077
Surr: 2,4,6-Tribromophenol	11.1	30.4-134	S	%REC	1	9/4/2014 11:50:31 AM	15077
Surr: Nitrobenzene-d5	68.4	54.8-128		%REC	1	9/4/2014 11:50:31 AM	15077
Surr: 2-Fluorobiphenyl	67.1	53.3-122		%REC	1	9/4/2014 11:50:31 AM	15077
Surr: 4-Terphenyl-d14	60.4	51.8-133		%REC	1	9/4/2014 11:50:31 AM	15077
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	9/4/2014 4:50:04 PM	15040
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	9/4/2014 4:50:04 PM	15040
2-Butanone	ND	200		ppm	10	9/4/2014 4:50:04 PM	15040
Carbon tetrachloride	ND	0.50		ppm	10	9/4/2014 4:50:04 PM	15040
Chlorobenzene	ND	100		ppm	10	9/4/2014 4:50:04 PM	15040
Chloroform	ND	6.0		ppm	10	9/4/2014 4:50:04 PM	15040
1,4-Dichlorobenzene	ND	7.5		ppm	10	9/4/2014 4:50:04 PM	15040
1,1-Dichloroethene	ND	0.70		ppm	10	9/4/2014 4:50:04 PM	15040
Tetrachloroethene (PCE)	ND	0.70		ppm	10	9/4/2014 4:50:04 PM	15040
Trichloroethene (TCE)	ND	0.50		ppm	10	9/4/2014 4:50:04 PM	15040
Vinyl chloride	ND	0.20		ppm	10	9/4/2014 4:50:04 PM	15040
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	10	9/4/2014 4:50:04 PM	15040
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	10	9/4/2014 4:50:04 PM	15040
Surr: Dibromofluoromethane	95.2	70-130		%REC	10	9/4/2014 4:50:04 PM	15040
Surr: Toluene-d8	96.2	70-130		%REC	10	9/4/2014 4:50:04 PM	15040
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	9400	200		mg/Kg	10	9/2/2014 12:00:00 PM	15036

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-003 **Matrix:** SOIL

Client Sample ID: B # 8 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:10:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	50	10		mg/Kg	1	9/4/2014 6:07:52 PM	15031
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/4/2014 6:07:52 PM	15031
Surr: DNOP	106	57.9-140		%REC	1	9/4/2014 6:07:52 PM	15031
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/2/2014 3:05:47 PM	15040
Surr: BFB	95.0	80-120		%REC	1	9/2/2014 3:05:47 PM	15040
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/2/2014 3:05:47 PM	15040
Toluene	ND	0.050		mg/Kg	1	9/2/2014 3:05:47 PM	15040
Ethylbenzene	ND	0.050		mg/Kg	1	9/2/2014 3:05:47 PM	15040
Xylenes, Total	ND	0.10		mg/Kg	1	9/2/2014 3:05:47 PM	15040
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	9/2/2014 3:05:47 PM	15040
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	190	30		mg/Kg	20	9/3/2014 2:00:11 PM	15086
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/4/2014 4:24:27 PM	15110
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	9/4/2014 10:04:52 AM	15099
Barium	ND	100		mg/L	1	9/4/2014 10:04:52 AM	15099
Cadmium	ND	1.0		mg/L	1	9/4/2014 10:04:52 AM	15099
Chromium	ND	5.0		mg/L	1	9/4/2014 10:04:52 AM	15099
Lead	ND	5.0		mg/L	1	9/4/2014 10:04:52 AM	15099
Selenium	ND	1.0		mg/L	1	9/4/2014 10:04:52 AM	15099
Silver	ND	5.0		mg/L	1	9/4/2014 10:04:52 AM	15099
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/5/2014 11:12:23 AM	15124
3+4-Methylphenol	ND	200		mg/L	1	9/5/2014 11:12:23 AM	15124
Phenol	ND	200		mg/L	1	9/5/2014 11:12:23 AM	15124
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/4/2014 12:19:49 PM	15077
Hexachlorobenzene	ND	0.13		mg/L	1	9/4/2014 12:19:49 PM	15077
Hexachlorobutadiene	ND	0.50		mg/L	1	9/4/2014 12:19:49 PM	15077
Hexachloroethane	ND	3.0		mg/L	1	9/4/2014 12:19:49 PM	15077
Nitrobenzene	ND	2.0		mg/L	1	9/4/2014 12:19:49 PM	15077
Pentachlorophenol	ND	100		mg/L	1	9/5/2014 11:12:23 AM	15124
Pyridine	ND	5.0		mg/L	1	9/4/2014 12:19:49 PM	15077
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/5/2014 11:12:23 AM	15124

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-003 **Matrix:** SOIL

Client Sample ID: B # 8 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:10:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/5/2014 11:12:23 AM	15124
Cresols, Total	ND	200		mg/L	1	9/5/2014 11:12:23 AM	15124
Surr: 2-Fluorophenol	52.4	25-105		%REC	1	9/5/2014 11:12:23 AM	15124
Surr: Phenol-d5	29.4	22.3-70.3		%REC	1	9/5/2014 11:12:23 AM	15124
Surr: 2,4,6-Tribromophenol	62.7	30.4-134		%REC	1	9/5/2014 11:12:23 AM	15124
Surr: Nitrobenzene-d5	94.2	54.8-128		%REC	1	9/4/2014 12:19:49 PM	15077
Surr: 2-Fluorobiphenyl	87.0	53.3-122		%REC	1	9/4/2014 12:19:49 PM	15077
Surr: 4-Terphenyl-d14	75.3	51.8-133		%REC	1	9/4/2014 12:19:49 PM	15077
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	9/4/2014 5:18:09 PM	R21010
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	9/4/2014 5:18:09 PM	R21010
2-Butanone	ND	200		ppm	10	9/4/2014 5:18:09 PM	R21010
Carbon tetrachloride	ND	0.50		ppm	10	9/4/2014 5:18:09 PM	R21010
Chlorobenzene	ND	100		ppm	10	9/4/2014 5:18:09 PM	R21010
Chloroform	ND	6.0		ppm	10	9/4/2014 5:18:09 PM	R21010
1,4-Dichlorobenzene	ND	7.5		ppm	10	9/4/2014 5:18:09 PM	R21010
1,1-Dichloroethene	ND	0.70		ppm	10	9/4/2014 5:18:09 PM	R21010
Tetrachloroethene (PCE)	ND	0.70		ppm	10	9/4/2014 5:18:09 PM	R21010
Trichloroethene (TCE)	ND	0.50		ppm	10	9/4/2014 5:18:09 PM	R21010
Vinyl chloride	ND	0.20		ppm	10	9/4/2014 5:18:09 PM	R21010
mp-Xylenes	ND	0.50		mg/Kg	10	9/4/2014 5:18:09 PM	R21010
o-Xylene	ND	0.50		mg/Kg	10	9/4/2014 5:18:09 PM	R21010
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	10	9/4/2014 5:18:09 PM	R21010
Surr: 4-Bromofluorobenzene	87.8	70-130		%REC	10	9/4/2014 5:18:09 PM	R21010
Surr: Dibromofluoromethane	95.8	70-130		%REC	10	9/4/2014 5:18:09 PM	R21010
Surr: Toluene-d8	94.9	70-130		%REC	10	9/4/2014 5:18:09 PM	R21010
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	73	20		mg/Kg	1	9/2/2014 12:00:00 PM	15036

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-004 **Matrix:** SOIL

Client Sample ID: B # 9 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:15:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	14	9.9		mg/Kg	1	9/3/2014 9:58:46 AM	15031
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/3/2014 9:58:46 AM	15031
Surr: DNOP	85.9	57.9-140		%REC	1	9/3/2014 9:58:46 AM	15031
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/2/2014 4:31:43 PM	15040
Surr: BFB	95.7	80-120		%REC	1	9/2/2014 4:31:43 PM	15040
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/2/2014 4:31:43 PM	15040
Toluene	ND	0.050		mg/Kg	1	9/2/2014 4:31:43 PM	15040
Ethylbenzene	ND	0.050		mg/Kg	1	9/2/2014 4:31:43 PM	15040
Xylenes, Total	ND	0.10		mg/Kg	1	9/2/2014 4:31:43 PM	15040
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	9/2/2014 4:31:43 PM	15040
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	110	30		mg/Kg	20	9/3/2014 2:12:35 PM	15086
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/4/2014 4:26:19 PM	15110
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	9/4/2014 10:06:06 AM	15099
Barium	ND	100		mg/L	1	9/4/2014 10:06:06 AM	15099
Cadmium	ND	1.0		mg/L	1	9/4/2014 10:06:06 AM	15099
Chromium	ND	5.0		mg/L	1	9/4/2014 10:06:06 AM	15099
Lead	ND	5.0		mg/L	1	9/4/2014 10:06:06 AM	15099
Selenium	ND	1.0		mg/L	1	9/4/2014 10:06:06 AM	15099
Silver	ND	5.0		mg/L	1	9/4/2014 10:06:06 AM	15099
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/4/2014 12:49:00 PM	15077
3+4-Methylphenol	ND	200		mg/L	1	9/4/2014 12:49:00 PM	15077
Phenol	ND	200		mg/L	1	9/4/2014 12:49:00 PM	15077
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/4/2014 12:49:00 PM	15077
Hexachlorobenzene	ND	0.13		mg/L	1	9/4/2014 12:49:00 PM	15077
Hexachlorobutadiene	ND	0.50		mg/L	1	9/4/2014 12:49:00 PM	15077
Hexachloroethane	ND	3.0		mg/L	1	9/4/2014 12:49:00 PM	15077
Nitrobenzene	ND	2.0		mg/L	1	9/4/2014 12:49:00 PM	15077
Pentachlorophenol	ND	100		mg/L	1	9/4/2014 12:49:00 PM	15077
Pyridine	ND	5.0		mg/L	1	9/4/2014 12:49:00 PM	15077
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/4/2014 12:49:00 PM	15077

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-004 **Matrix:** SOIL

Client Sample ID: B # 9 .WWTP Dirty Sewer Spill
Collection Date: 8/27/2014 4:15:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	2.0	*	mg/L	1	9/4/2014 12:49:00 PM	15077
Cresols, Total	ND	200		mg/L	1	9/4/2014 12:49:00 PM	15077
Surr: 2-Fluorophenol	68.1	25-105		%REC	1	9/4/2014 12:49:00 PM	15077
Surr: Phenol-d5	49.4	22.3-70.3		%REC	1	9/4/2014 12:49:00 PM	15077
Surr: 2,4,6-Tribromophenol	37.8	30.4-134		%REC	1	9/4/2014 12:49:00 PM	15077
Surr: Nitrobenzene-d5	98.6	54.8-128		%REC	1	9/4/2014 12:49:00 PM	15077
Surr: 2-Fluorobiphenyl	96.4	53.3-122		%REC	1	9/4/2014 12:49:00 PM	15077
Surr: 4-Terphenyl-d14	87.4	51.8-133		%REC	1	9/4/2014 12:49:00 PM	15077
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	9/4/2014 5:46:12 PM	R21010
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	9/4/2014 5:46:12 PM	R21010
2-Butanone	ND	200		ppm	10	9/4/2014 5:46:12 PM	R21010
Carbon tetrachloride	ND	0.50		ppm	10	9/4/2014 5:46:12 PM	R21010
Chlorobenzene	ND	100		ppm	10	9/4/2014 5:46:12 PM	R21010
Chloroform	ND	6.0		ppm	10	9/4/2014 5:46:12 PM	R21010
1,4-Dichlorobenzene	ND	7.5		ppm	10	9/4/2014 5:46:12 PM	R21010
1,1-Dichloroethene	ND	0.70		ppm	10	9/4/2014 5:46:12 PM	R21010
Tetrachloroethene (PCE)	ND	0.70		ppm	10	9/4/2014 5:46:12 PM	R21010
Trichloroethene (TCE)	ND	0.50		ppm	10	9/4/2014 5:46:12 PM	R21010
Vinyl chloride	ND	0.20		ppm	10	9/4/2014 5:46:12 PM	R21010
mp-Xylenes	ND	0.50		mg/Kg	10	9/4/2014 5:46:12 PM	R21010
o-Xylene	ND	0.50		mg/Kg	10	9/4/2014 5:46:12 PM	R21010
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	10	9/4/2014 5:46:12 PM	R21010
Surr: 4-Bromofluorobenzene	84.9	70-130		%REC	10	9/4/2014 5:46:12 PM	R21010
Surr: Dibromofluoromethane	93.8	70-130		%REC	10	9/4/2014 5:46:12 PM	R21010
Surr: Toluene-d8	95.5	70-130		%REC	10	9/4/2014 5:46:12 PM	R21010
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	24	20		mg/Kg	1	9/2/2014 12:00:00 PM	15036

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-005 **Matrix:** SOIL

Client Sample ID: B # 10 .WWTP Dirty Sewer Spil
Collection Date: 8/27/2014 4:20:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/3/2014 10:28:33 AM	15031
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/3/2014 10:28:33 AM	15031
Surr: DNOP	86.4	57.9-140		%REC	1	9/3/2014 10:28:33 AM	15031
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/2/2014 5:00:28 PM	15040
Surr: BFB	97.9	80-120		%REC	1	9/2/2014 5:00:28 PM	15040
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/2/2014 5:00:28 PM	15040
Toluene	ND	0.050		mg/Kg	1	9/2/2014 5:00:28 PM	15040
Ethylbenzene	ND	0.050		mg/Kg	1	9/2/2014 5:00:28 PM	15040
Xylenes, Total	ND	0.10		mg/Kg	1	9/2/2014 5:00:28 PM	15040
Surr: 4-Bromofluorobenzene	106	80-120		%REC	1	9/2/2014 5:00:28 PM	15040
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	ND	30		mg/Kg	20	9/3/2014 2:25:00 PM	15086
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/4/2014 4:28:11 PM	15110
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	9/4/2014 10:07:21 AM	15099
Barium	ND	100		mg/L	1	9/4/2014 10:07:21 AM	15099
Cadmium	ND	1.0		mg/L	1	9/4/2014 10:07:21 AM	15099
Chromium	ND	5.0		mg/L	1	9/4/2014 10:07:21 AM	15099
Lead	ND	5.0		mg/L	1	9/4/2014 10:07:21 AM	15099
Selenium	ND	1.0		mg/L	1	9/4/2014 10:07:21 AM	15099
Silver	ND	5.0		mg/L	1	9/4/2014 10:07:21 AM	15099
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/4/2014 1:18:18 PM	15077
3+4-Methylphenol	ND	200		mg/L	1	9/4/2014 1:18:18 PM	15077
Phenol	ND	200		mg/L	1	9/4/2014 1:18:18 PM	15077
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/4/2014 1:18:18 PM	15077
Hexachlorobenzene	ND	0.13		mg/L	1	9/4/2014 1:18:18 PM	15077
Hexachlorobutadiene	ND	0.50		mg/L	1	9/4/2014 1:18:18 PM	15077
Hexachloroethane	ND	3.0		mg/L	1	9/4/2014 1:18:18 PM	15077
Nitrobenzene	ND	2.0		mg/L	1	9/4/2014 1:18:18 PM	15077
Pentachlorophenol	ND	100		mg/L	1	9/4/2014 1:18:18 PM	15077
Pyridine	ND	5.0		mg/L	1	9/4/2014 1:18:18 PM	15077
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/4/2014 1:18:18 PM	15077

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-005 **Matrix:** SOIL

Client Sample ID: B # 10 .WWTP Dirty Sewer Spil
Collection Date: 8/27/2014 4:20:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/4/2014 1:18:18 PM	15077
Cresols, Total	ND	200		mg/L	1	9/4/2014 1:18:18 PM	15077
Surr: 2-Fluorophenol	46.0	25-105		%REC	1	9/4/2014 1:18:18 PM	15077
Surr: Phenol-d5	31.1	22.3-70.3		%REC	1	9/4/2014 1:18:18 PM	15077
Surr: 2,4,6-Tribromophenol	27.5	30.4-134	S	%REC	1	9/4/2014 1:18:18 PM	15077
Surr: Nitrobenzene-d5	64.3	54.8-128		%REC	1	9/4/2014 1:18:18 PM	15077
Surr: 2-Fluorobiphenyl	62.6	53.3-122		%REC	1	9/4/2014 1:18:18 PM	15077
Surr: 4-Terphenyl-d14	62.3	51.8-133		%REC	1	9/4/2014 1:18:18 PM	15077
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	9/4/2014 6:14:13 PM	R21010
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	9/4/2014 6:14:13 PM	R21010
2-Butanone	ND	200		ppm	10	9/4/2014 6:14:13 PM	R21010
Carbon tetrachloride	ND	0.50		ppm	10	9/4/2014 6:14:13 PM	R21010
Chlorobenzene	ND	100		ppm	10	9/4/2014 6:14:13 PM	R21010
Chloroform	ND	6.0		ppm	10	9/4/2014 6:14:13 PM	R21010
1,4-Dichlorobenzene	ND	7.5		ppm	10	9/4/2014 6:14:13 PM	R21010
1,1-Dichloroethene	ND	0.70		ppm	10	9/4/2014 6:14:13 PM	R21010
Tetrachloroethene (PCE)	ND	0.70		ppm	10	9/4/2014 6:14:13 PM	R21010
Trichloroethene (TCE)	ND	0.50		ppm	10	9/4/2014 6:14:13 PM	R21010
Vinyl chloride	ND	0.20		ppm	10	9/4/2014 6:14:13 PM	R21010
mp-Xylenes	ND	0.50		mg/Kg	10	9/4/2014 6:14:13 PM	R21010
o-Xylene	ND	0.50		mg/Kg	10	9/4/2014 6:14:13 PM	R21010
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	10	9/4/2014 6:14:13 PM	R21010
Surr: 4-Bromofluorobenzene	85.4	70-130		%REC	10	9/4/2014 6:14:13 PM	R21010
Surr: Dibromofluoromethane	95.5	70-130		%REC	10	9/4/2014 6:14:13 PM	R21010
Surr: Toluene-d8	94.8	70-130		%REC	10	9/4/2014 6:14:13 PM	R21010
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	140	20		mg/Kg	1	9/2/2014 12:00:00 PM	15036

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-006 **Matrix:** SOIL

Client Sample ID: B # 11 .WWTP Dirty Sewer Spil
Collection Date: 8/27/2014 4:25:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/3/2014 10:58:41 AM	15031
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/3/2014 10:58:41 AM	15031
Surr: DNOP	80.9	57.9-140		%REC	1	9/3/2014 10:58:41 AM	15031
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/2/2014 5:29:09 PM	15040
Surr: BFB	95.9	80-120		%REC	1	9/2/2014 5:29:09 PM	15040
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/2/2014 5:29:09 PM	15040
Toluene	ND	0.050		mg/Kg	1	9/2/2014 5:29:09 PM	15040
Ethylbenzene	ND	0.050		mg/Kg	1	9/2/2014 5:29:09 PM	15040
Xylenes, Total	ND	0.10		mg/Kg	1	9/2/2014 5:29:09 PM	15040
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	9/2/2014 5:29:09 PM	15040
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	ND	30		mg/Kg	20	9/3/2014 2:37:25 PM	15086
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/4/2014 4:30:07 PM	15110
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	9/4/2014 10:11:06 AM	15099
Barium	ND	100		mg/L	1	9/4/2014 10:11:06 AM	15099
Cadmium	ND	1.0		mg/L	1	9/4/2014 10:11:06 AM	15099
Chromium	ND	5.0		mg/L	1	9/4/2014 10:11:06 AM	15099
Lead	ND	5.0		mg/L	1	9/4/2014 10:11:06 AM	15099
Selenium	ND	1.0		mg/L	1	9/4/2014 10:11:06 AM	15099
Silver	ND	5.0		mg/L	1	9/4/2014 10:11:06 AM	15099
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/5/2014 11:41:28 AM	15124
3+4-Methylphenol	ND	200		mg/L	1	9/5/2014 11:41:28 AM	15124
Phenol	ND	200		mg/L	1	9/5/2014 11:41:28 AM	15124
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/4/2014 1:47:35 PM	15077
Hexachlorobenzene	ND	0.13		mg/L	1	9/4/2014 1:47:35 PM	15077
Hexachlorobutadiene	ND	0.50		mg/L	1	9/4/2014 1:47:35 PM	15077
Hexachloroethane	ND	3.0		mg/L	1	9/4/2014 1:47:35 PM	15077
Nitrobenzene	ND	2.0		mg/L	1	9/4/2014 1:47:35 PM	15077
Pentachlorophenol	ND	100		mg/L	1	9/5/2014 11:41:28 AM	15124
Pyridine	ND	5.0		mg/L	1	9/4/2014 1:47:35 PM	15077
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/5/2014 11:41:28 AM	15124

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408F15-006 **Matrix:** SOIL

Client Sample ID: B # 11 .WWTP Dirty Sewer Spil
Collection Date: 8/27/2014 4:25:00 PM
Received Date: 8/28/2014 4:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/5/2014 11:41:28 AM	15124
Cresols, Total	ND	200		mg/L	1	9/5/2014 11:41:28 AM	15124
Surr: 2-Fluorophenol	55.8	25-105		%REC	1	9/5/2014 11:41:28 AM	15124
Surr: Phenol-d5	37.3	22.3-70.3		%REC	1	9/5/2014 11:41:28 AM	15124
Surr: 2,4,6-Tribromophenol	51.6	30.4-134		%REC	1	9/5/2014 11:41:28 AM	15124
Surr: Nitrobenzene-d5	77.1	54.8-128		%REC	1	9/4/2014 1:47:35 PM	15077
Surr: 2-Fluorobiphenyl	71.1	53.3-122		%REC	1	9/4/2014 1:47:35 PM	15077
Surr: 4-Terphenyl-d14	67.4	51.8-133		%REC	1	9/4/2014 1:47:35 PM	15077
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	9/4/2014 6:42:14 PM	R21010
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	9/4/2014 6:42:14 PM	R21010
2-Butanone	ND	200		ppm	10	9/4/2014 6:42:14 PM	R21010
Carbon tetrachloride	ND	0.50		ppm	10	9/4/2014 6:42:14 PM	R21010
Chlorobenzene	ND	100		ppm	10	9/4/2014 6:42:14 PM	R21010
Chloroform	ND	6.0		ppm	10	9/4/2014 6:42:14 PM	R21010
1,4-Dichlorobenzene	ND	7.5		ppm	10	9/4/2014 6:42:14 PM	R21010
1,1-Dichloroethene	ND	0.70		ppm	10	9/4/2014 6:42:14 PM	R21010
Tetrachloroethene (PCE)	ND	0.70		ppm	10	9/4/2014 6:42:14 PM	R21010
Trichloroethene (TCE)	ND	0.50		ppm	10	9/4/2014 6:42:14 PM	R21010
Vinyl chloride	ND	0.20		ppm	10	9/4/2014 6:42:14 PM	R21010
mp-Xylenes	ND	0.50		mg/Kg	10	9/4/2014 6:42:14 PM	R21010
o-Xylene	ND	0.50		mg/Kg	10	9/4/2014 6:42:14 PM	R21010
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%REC	10	9/4/2014 6:42:14 PM	R21010
Surr: 4-Bromofluorobenzene	87.1	70-130		%REC	10	9/4/2014 6:42:14 PM	R21010
Surr: Dibromofluoromethane	93.7	70-130		%REC	10	9/4/2014 6:42:14 PM	R21010
Surr: Toluene-d8	98.9	70-130		%REC	10	9/4/2014 6:42:14 PM	R21010
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	27	20		mg/Kg	1	9/2/2014 12:00:00 PM	15036

Refer to the QC Summary report and 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		

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REPORT OF ANALYSIS

September 04, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L719123-01

Date Received : August 30, 2014
Description :

Site ID :

Sample ID : 1408F15-001B B6 WWTP DIRTY SEWER SPILL

Project # :

Collected By :
Collection Date : 08/27/14 16:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	09/03/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	09/03/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	09/04/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	09/03/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/04/14 09:57 Revised: 09/04/14 16:20
L719123-01 (IGNITABILITY) - Did Not Ignite @ 170 F

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REPORT OF ANALYSIS

September 04, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L719123-02

Date Received : August 30, 2014
Description :

Site ID :

Sample ID : 1408F15-002B B7 WWTP DIRTY SEWER SPILL

Project # :

Collected By :
Collection Date : 08/27/14 16:05

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	09/03/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	09/03/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	09/04/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	09/03/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 09/04/14 09:57 Revised: 09/04/14 16:20
L719123-02 (IGNITABILITY) - Did Not Ignite @ 170 F

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REPORT OF ANALYSIS

September 04, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L719123-03

Date Received : August 30, 2014
Description :

Site ID :

Sample ID : 1408F15-003B B8 WWTP DIRTY SEWER SPILL

Project # :

Collected By :
Collection Date : 08/27/14 16:10

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	09/03/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	09/03/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	09/04/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	09/03/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 09/04/14 09:57 Revised: 09/04/14 16:20
L719123-03 (IGNITABILITY) - Did Not Ignite @ 170 F

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REPORT OF ANALYSIS

September 04, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : August 30, 2014
Description :

Sample ID : 1408F15-004B B9 WWTP DIRTY SEWER SPILL

Collected By :
Collection Date : 08/27/14 16:15

ESC Sample # : L719123-04

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	09/03/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	09/03/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	09/04/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	09/03/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 09/04/14 09:57 Revised: 09/04/14 16:20
L719123-04 (IGNITABILITY) - Did Not Ignite @ 170 F

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REPORT OF ANALYSIS

September 04, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L719123-05

Date Received : August 30, 2014
Description :

Site ID :

Sample ID : 1408F15-005B B10 WWTP DIRTY SEWER SPILL

Project # :

Collected By :
Collection Date : 08/27/14 16:20

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	09/03/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	09/03/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	09/04/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	09/03/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 09/04/14 09:57 Revised: 09/04/14 16:20
L719123-05 (IGNITABILITY) - Did Not Ignite @ 170 F

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REPORT OF ANALYSIS

September 04, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L719123-06

Date Received : August 30, 2014
Description :

Site ID :

Sample ID : 1408F15-006B B11 WWTP DIRTY SEWER SPILL

Project # :

Collected By :
Collection Date : 08/27/14 16:25

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	09/03/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	09/03/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	09/04/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	09/03/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/04/14 09:57 Revised: 09/04/14 16:20
L719123-06 (IGNITABILITY) - Did Not Ignite @ 170 F

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Hall Environmental Analysis Laboratory

4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L719123

September 04, 2014

Laboratory Blank

Analyte *	Result	Units	% Rec	* Limit	Batch	Date Analyzed
Reactive Sulf.(SW846 7.3.4.1)	< 25	mg/kg			WG740721	09/03/14 15:56
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG740724	09/04/14 09:11

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Corrosivity		0.0	0.0	0.0	10	L718412-01	WG740448
Corrosivity		0.0	0.0	0.0	10	L719123-06	WG740448
Ignitability	Deg. F	0.00	0.00	0.00	10	L719123-02	WG740706
Ignitability	Deg. F	0.00	0.00	0.00	10	L719123-06	WG740706
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	0.0	0.0	0.0	20	L719123-06	WG740721
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0	0.0	0.0	20	L719123-06	WG740724

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Corrosivity		6.33	6.40	101.	98.3-101.7	WG740448
Ignitability	Deg. F	82	82.0	100.	93-107	WG740706
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	100	89.0	89.0	70-130	WG740721
Reactive CN (SW846 7.3.3.2)	mg/kg	67.7	93.5	138.	50-150	WG740724

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Corrosivity		6.30	6.40	100.	98.3-101.7	1.57	10	WG740448
Ignitability	Deg. F	83.0	82.0	101.	93-107	1.21	20	WG740706
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	89.0	89.0	89.0	70-130	0.0	20	WG740721
Reactive CN (SW846 7.3.3.2)	mg/kg	85.5	93.5	126.	50-150	8.94	20	WG740724

Batch number /Run number / Sample number cross reference

WG740448: R2984567: L719123-01 02 03 04 05 06
WG740706: R2984568: L719123-01 02 03 04 05 06
WG740721: R2984651: L719123-01 02 03 04 05 06
WG740724: R2984980: L719123-01 02 03 04 05 06

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	**MB-15086**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**
Client ID:	**PBS**	Batch ID:	**15086**	RunNo:	**20981**
Prep Date:	**9/3/2014**	Analysis Date:	**9/3/2014**	SeqNo:	**610807** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-15086**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**
Client ID:	**LCSS**	Batch ID:	**15086**	RunNo:	**20981**
Prep Date:	**9/3/2014**	Analysis Date:	**9/3/2014**	SeqNo:	**610808** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or 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#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-15036** SampType: **MBLK** TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS** Batch ID: **15036** RunNo: **20914**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **608439** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20	*							*

Sample ID **LCS-15036** SampType: **LCS** TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS** Batch ID: **15036** RunNo: **20914**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **608440** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	98.1	80	120			

Sample ID **LCSD-15036** SampType: **LCSD** TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02** Batch ID: **15036** RunNo: **20914**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **608441** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	94	20	100.0	0	93.5	80	120	4.80	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15031** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **15031** RunNo: **20880**

Prep Date: **8/29/2014** Analysis Date: **8/29/2014** SeqNo: **607914** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		92.7	57.9	140			

Sample ID **LCS-15031** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **15031** RunNo: **20880**

Prep Date: **8/29/2014** Analysis Date: **8/29/2014** SeqNo: **607922** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.9	68.6	130			
Surr: DNOP	4.4		5.000		87.8	57.9	140			

Sample ID **MB-15081** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **15081** RunNo: **20948**

Prep Date: **9/3/2014** Analysis Date: **9/3/2014** SeqNo: **610141** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		86.0	57.9	140			

Sample ID **LCS-15081** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **15081** RunNo: **20948**

Prep Date: **9/3/2014** Analysis Date: **9/3/2014** SeqNo: **610142** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		76.2	57.9	140			

Sample ID **MB-15053** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **15053** RunNo: **20950**

Prep Date: **9/2/2014** Analysis Date: **9/3/2014** SeqNo: **610293** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.2		10.00		71.9	57.9	140			

Sample ID **LCS-15053** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **15053** RunNo: **20950**

Prep Date: **9/2/2014** Analysis Date: **9/3/2014** SeqNo: **610294** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		78.6	57.9	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-15106**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**						
Client ID: **PBS**	Batch ID: **15106**			RunNo: **20982**						
Prep Date: **9/4/2014**	Analysis Date: **9/4/2014**			SeqNo: **610877**		Units: **%REC**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		*83.8	57.9	140			

Sample ID **LCS-15106**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**						
Client ID: **LCSS**	Batch ID: **15106**			RunNo: **20982**						
Prep Date: **9/4/2014**	Analysis Date: **9/4/2014**			SeqNo: **610878**		Units: **%REC**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		82.5	57.9	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15040** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **15040** RunNo: **20945**

Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609445** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.0	80	120			

Sample ID **LCS-15040** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **15040** RunNo: **20945**

Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609446** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	65.8	139			
Surr: BFB	1000		1000		101	80	120			

Sample ID **1408F15-002AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **B # 7 .WWTP Dirty S** Batch ID: **15040** RunNo: **20945**

Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609452** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	24.90	3.816	95.0	71.8	132			
Surr: BFB	1300		996.0		129	80	120			S

Sample ID **1408F15-002AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **B # 7 .WWTP Dirty S** Batch ID: **15040** RunNo: **20945**

Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609453** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	3.816	100	71.8	132	4.94	20	
Surr: BFB	1300		1000		131	80	120	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-15040** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **15040** RunNo: **20945**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene *	ND	0.050				*				
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **LCS-15040** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **15040** RunNo: **20945**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609463** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.0	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID **1408F15-003AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **B # 8 .WWTP Dirty S** Batch ID: **15040** RunNo: **20945**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	0.9980	0	97.4	77.4	142			
Toluene	0.99	0.050	0.9980	0.008482	98.0	77	132			
Ethylbenzene	1.0	0.050	0.9980	0.01317	103	77.6	134			
Xylenes, Total	3.2	0.10	2.994	0.07580	104	77.4	132			
Surr: 4-Bromofluorobenzene	1.2		0.9980		122	80	120			S

Sample ID **1408F15-003AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **B # 8 .WWTP Dirty S** Batch ID: **15040** RunNo: **20945**
Prep Date: **8/29/2014** Analysis Date: **9/2/2014** SeqNo: **609471** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	0.9980	0	96.9	77.4	142	0.500	20	
Toluene	1.0	0.050	0.9980	0.008482	99.3	77	132	1.33	20	
Ethylbenzene	1.0	0.050	0.9980	0.01317	103	77.6	134	0.272	20	
Xylenes, Total	3.2	0.10	2.994	0.07580	103	77.4	132	0.813	20	
Surr: 4-Bromofluorobenzene	1.1		0.9980		112	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**
08-Sep-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **mb-15040** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **PBS** Batch ID: **15040** RunNo: **20965**
Prep Date: **8/29/2014** Analysis Date: **9/3/2014** SeqNo: **611068** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		78.4	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		84.3	70	130			
Surr: Dibromofluoromethane	0.39		0.5000		78.9	70	130			
Surr: Toluene-d8	0.46		0.5000		91.2	70	130			

Sample ID **lcs-15040** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **LCSS** Batch ID: **15040** RunNo: **20965**
Prep Date: **8/29/2014** Analysis Date: **9/3/2014** SeqNo: **611069** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.050	1.000	0	88.0	70	130			
Chlorobenzene	0.86	0.20	1.000	0	85.6	70	130			
1,1-Dichloroethene	0.82	0.070	1.000	0	81.8	60.5	160			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.2	58.8	139			
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.3	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.1	70	130			
Surr: Dibromofluoromethane	0.42		0.5000		83.9	70	130			
Surr: Toluene-d8	0.47		0.5000		93.5	70	130			

Sample ID **1408f15-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **B # 6 .WWTP Dirty S** Batch ID: **15040** RunNo: **21010**
Prep Date: **8/29/2014** Analysis Date: **9/4/2014** SeqNo: **611726** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.50	0.9960	0	85.3	32.2	145			
Chlorobenzene	0.88	0.10	0.9960	0	88.4	32.4	142			
1,1-Dichloroethene	0.62	0.10	0.9960	0	62.3	32.6	155			
Trichloroethene (TCE)	0.86	0.50	0.9960	0.007335	85.4	29.2	150			
Surr: 1,2-Dichloroethane-d4	4.8		4.980		95.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **1408f15-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **B # 6 .WWTP Dirty S** Batch ID: **15040** RunNo: **21010**

Prep Date: **8/29/2014** Analysis Date: **9/4/2014** SeqNo: **611726** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	4.6		4.980		92.7	70	130			
Surr: Dibromofluoromethane	4.7		4.980		93.8	70	130			
Surr: Toluene-d8	4.8		4.980		95.9	70	130			

Sample ID **1408f15-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **B # 6 .WWTP Dirty S** Batch ID: **15040** RunNo: **21010**

Prep Date: **8/29/2014** Analysis Date: **9/4/2014** SeqNo: **611727** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.50	0.9990	0	90.9	32.2	145	6.62	20	
Chlorobenzene	0.85	0.10	0.9990	0	85.1	32.4	142	3.46	20	
1,1-Dichloroethene	0.71	0.70	0.9990	0	70.6	32.6	155	12.9	20	
Trichloroethene (TCE)	0.91	0.50	0.9990	0.007335	90.8	29.2	150	6.31	20	
Surr: 1,2-Dichloroethane-d4	4.8		4.995		95.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	4.4		4.995		87.7	70	130	0	0	
Surr: Dibromofluoromethane	4.8		4.995		95.5	70	130	0	0	
Surr: Toluene-d8	4.8		4.995		96.4	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **mb-15077** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**

Client ID: **PBS** Batch ID: **15077** RunNo: **20972**

Prep Date: **9/3/2014** Analysis Date: **9/3/2014** SeqNo: **610620** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.14		0.2000		71.0	25	105			
Surr: Phenol-d5	0.097		0.2000		48.6	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.14		0.2000		72.1	30.4	134			
Surr: Nitrobenzene-d5	0.094		0.1000		93.9	54.8	128			
Surr: 2-Fluorobiphenyl	0.088		0.1000		88.3	53.3	122			
Surr: 4-Terphenyl-d14	0.094		0.1000		93.7	51.8	133			

Sample ID **lcs-15077** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**

Client ID: **LCSS** Batch ID: **15077** RunNo: **20972**

Prep Date: **9/3/2014** Analysis Date: **9/3/2014** SeqNo: **610621** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.085	0.010	0.1000	0	84.9	52.2	95.7			
3+4-Methylphenol	0.17	0.010	0.2000	0	85.9	52.4	142			
2,4-Dinitrotoluene	0.084	0.010	0.1000	0	84.3	43.4	110			
Hexachlorobenzene	0.095	0.010	0.1000	0	95.2	43.6	88.4			S
Hexachlorobutadiene	0.063	0.010	0.1000	0	63.2	38.6	88.4			
Hexachloroethane	0.074	0.010	0.1000	0	73.6	45.7	83.6			
Nitrobenzene	0.094	0.010	0.1000	0	94.1	51.9	112			
Pentachlorophenol	0.054	0.010	0.1000	0	54.5	15.2	81.5			
Pyridine	0.038	0.010	0.1000	0	38.3	11.2	95.1			
2,4,5-Trichlorophenol	0.081	0.010	0.1000	0	80.5	46.9	110			
2,4,6-Trichlorophenol	0.078	0.010	0.1000	0	78.0	36.1	111			
Cresols, Total	0.26	0.010	0.3000	0	85.6	30	136			
Surr: 2-Fluorophenol	0.14		0.2000		71.8	25	105			
Surr: Phenol-d5	0.096		0.2000		48.1	22.3	70.3			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **lcs-15077** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS** Batch ID: **15077** RunNo: **20972**
Prep Date: **9/3/2014** Analysis Date: **9/3/2014** SeqNo: **610621** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.15		0.2000		75.0	30.4	134	*		
Surr: Nitrobenzene-d5	0.10		0.1000		100	54.8	128			
Surr: 2-Fluorobiphenyl	0.094		0.1000		93.7	53.3	122			
Surr: 4-Terphenyl-d14	0.10		0.1000		102	51.8	133			

Sample ID **mb-15124** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**
Client ID: **PBS** Batch ID: **15124** RunNo: **21017**
Prep Date: **9/4/2014** Analysis Date: **9/5/2014** SeqNo: **611904** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
Pentachlorophenol	ND	100								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.12		0.2000		58.8	25	105			
Surr: Phenol-d5	0.082		0.2000		41.0	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		59.4	30.4	134			
Surr: Nitrobenzene-d5	0.071		0.1000		71.2	54.8	128			
Surr: 2-Fluorobiphenyl	0.065		0.1000		64.6	53.3	122			
Surr: 4-Terphenyl-d14	0.076		0.1000		75.6	51.8	133			

Sample ID **lcs-15124** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS** Batch ID: **15124** RunNo: **21017**
Prep Date: **9/4/2014** Analysis Date: **9/5/2014** SeqNo: **612042** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.052	0.010	0.1000	0	52.4	52.2	95.7			
3+4-Methylphenol	0.11	0.010	0.2000	0	53.7	52.4	142			
Pentachlorophenol	0.029	0.010	0.1000	0	28.6	15.2	81.5			
2,4,5-Trichlorophenol	0.054	0.010	0.1000	0	54.2	46.9	110			
2,4,6-Trichlorophenol	0.049	0.010	0.1000	0	49.3	36.1	111			
Cresols, Total	0.16	0.010	0.3000	0	53.3	30	136			
Surr: 2-Fluorophenol	0.087		0.2000		43.5	25	105			
Surr: Phenol-d5	0.059		0.2000		29.4	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.11		0.2000		54.2	30.4	134			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15110**	SampType: **MBLK**			TestCode: **MERCURY, TCLP**						
Client ID: **PBW**	Batch ID: **15110**			RunNo: **20998**						
Prep Date: **9/4/2014**	Analysis Date: **9/4/2014**			SeqNo: **611074**			Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	* ND	0.020								

Sample ID **LCS-15110**	SampType: **LCS**			TestCode: **MERCURY, TCLP**						
Client ID: **LCSW**	Batch ID: **15110**			RunNo: **20998**						
Prep Date: **9/4/2014**	Analysis Date: **9/4/2014**			SeqNo: **611075**			Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	108	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or 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#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-15099** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **15099** RunNo: **20977**
Prep Date: **9/3/2014** Analysis Date: **9/4/2014** SeqNo: **610674** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID **LCS-15099** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **15099** RunNo: **20977**
Prep Date: **9/3/2014** Analysis Date: **9/4/2014** SeqNo: **610675** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	107	80	120			
Barium	ND	100	0.5000	0	93.5	80	120			
Cadmium	ND	1.0	0.5000	0	99.9	80	120			
Chromium	ND	5.0	0.5000	0	96.2	80	120			
Lead	ND	5.0	0.5000	0	92.5	80	120			
Selenium	ND	1.0	0.5000	0	102	80	120			
Silver	ND	5.0	0.5000	0	103	80	120			

Sample ID **1408F15-005AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **B # 10 .WWTP Dirty** Batch ID: **15099** RunNo: **20977**
Prep Date: **9/3/2014** Analysis Date: **9/4/2014** SeqNo: **610691** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	103	75	125			
Barium	ND	100	0.5000	1.401	78.9	75	125			
Cadmium	ND	1.0	0.5000	0	97.4	75	125			
Chromium	ND	5.0	0.5000	0	90.5	75	125			
Lead	ND	5.0	0.5000	0	87.5	75	125			
Selenium	ND	1.0	0.5000	0	92.0	75	125			
Silver	ND	5.0	0.5000	0	103	75	125			

Sample ID **1408F15-005AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **B # 10 .WWTP Dirty** Batch ID: **15099** RunNo: **20977**
Prep Date: **9/3/2014** Analysis Date: **9/4/2014** SeqNo: **610692** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	102	75	125	0	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408F15**

08-Sep-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **1408F15-005AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **B # 10 .WWTP Dirty** Batch ID: **15099** RunNo: **20977**

Prep Date: **9/3/2014** Analysis Date: **9/4/2014** SeqNo: **610692** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	* 1.401	83.4	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	97.5	75	125	0	20	
Chromium	ND	5.0	0.5000	0	90.6	75	125	0	20	
Lead	ND	5.0	0.5000	0	87.3	75	125	0	20	
Selenium	ND	1.0	0.5000	0	90.3	75	125	0	20	
Silver	ND	5.0	0.5000	0	103	75	125	0	20	

Qualifiers:

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

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: **Western Refining Gallup** Work Order Number: **1408F15** RcptNo: **1**

Received by/date: CS 08/28/14

Logged By: **Lindsay Mangin** 8/28/2014 4:35:00 PM

Completed By: **Lindsay Mangin** 8/29/2014 7:35:44 AM

Reviewed By: MG 08/29/14

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? Client

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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western - Refining

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush _____

Project Name: WWTP Baker Tank Overflow

Project #:

Dirty Sewer Spill

Project Manager: Beck Larsen

Sampler: CTI

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

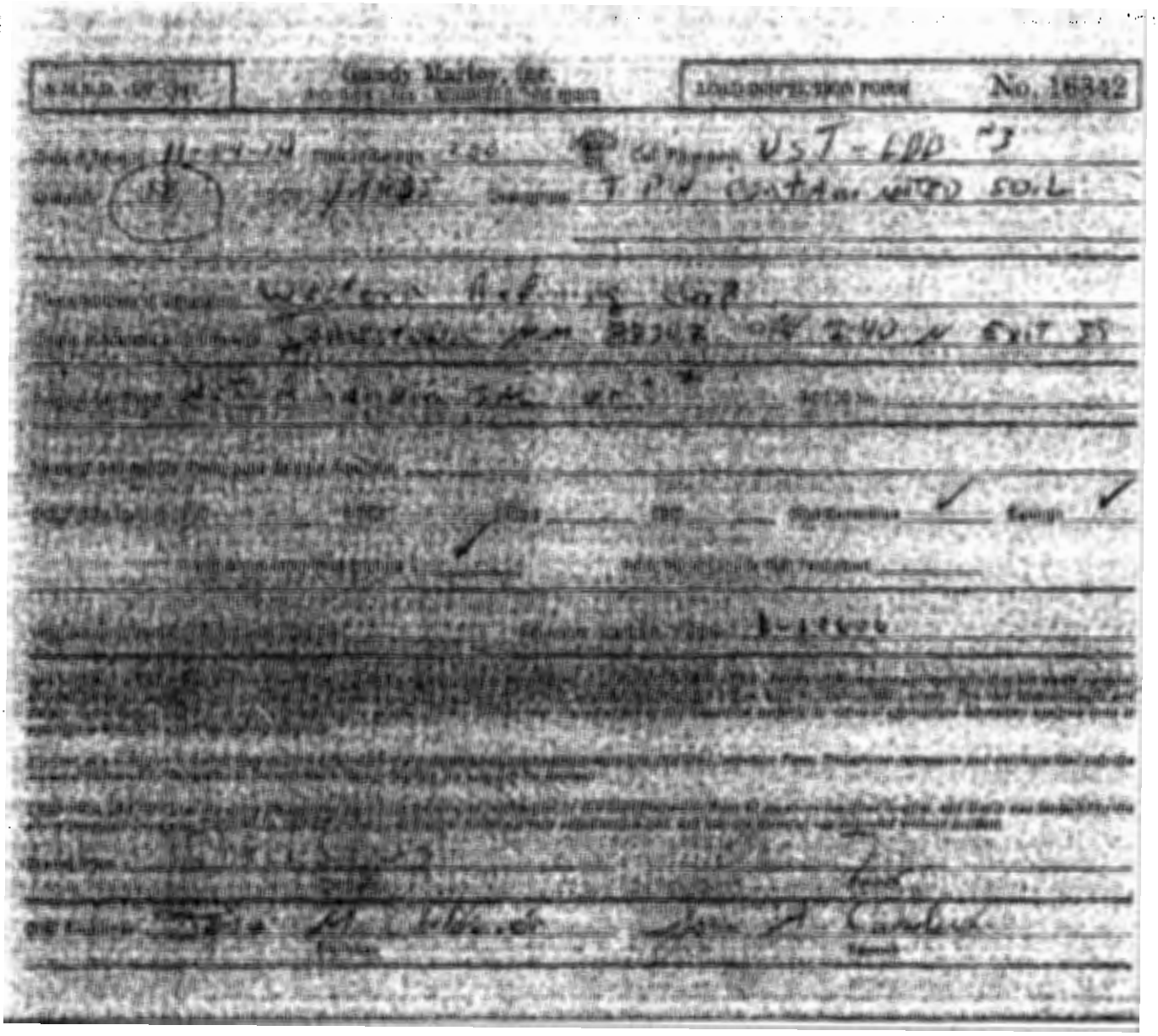
Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1408F15	BTEX (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals	Oil & Grease	Chlorides	Air Bubbles (Y or N)
8/27/2014	16:00	Soil	B # 6 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-001	X		X	X						X	X	X	X		X	
8/27/2014	16:05	Soil	B # 7 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-002	X		X	X						X	X	X	X		X	
8/27/2014	16:10	Soil	B # 8 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-003	X		X	X						X	X	X	X		X	
8/27/2014	16:15	Soil	B # 9 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-004	X		X	X						X	X	X	X		X	
8/27/2014	16:20	Soil	B # 10 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-005	X		X	X						X	X	X	X		X	
8/27/2014	16:25	Soil	B # 11 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-006	X		X	X						X	X	X	X		X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
08-28-14	1400	Alvin Dorsey		8-28-	1400
8/28/14	1635		Celina Sua	08/28/14	1635

Remarks:

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.



Grady Harley, Inc.

No. 16342

$$18\ yd^3 \times \frac{27\ ft^3}{yd^3} \times \frac{90\ lb}{ft^3} = 43740\ lb$$

$$1\ yd^3 = 2430\ lb$$

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NMR000037211

Manifest Document No. [illegible]

2. Page 1 of 1

3. Generator's Name and Mailing Address
WESTERN REFINING SOUTHWEST GALLUP REFINERY
I-40 exit 39 Route 3 Box 7
Jamestown, NM 87347

4. Generator's Phone (505 722 0258

5. Transporter 1 Company Name: Advanced Chemical Transport Inc. (SV)

6. US EPA ID Number: CAR000170540

A. State Transporter's ID

B. Transporter 1 Phone: 702-544-5050

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Gandy Marley, Inc.
Section 4,5,8 & 9 of T11S, R31E NMPM
Chaves County, NM 88202

10. US EPA ID Number: NON HAZ

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
Non RCRA/Non DOT Regulated Material Solid (TPH SOIL)	1	CM	18	Y
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
Project Number 59482 Bill # 420053
TPH Soil
24 hour emergency contact: Baker Tank Overflow

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: ALVIN Dorsey
Signature: Alvin Dorsey
Date: Month 11 Day 24 Year 14

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Alfonso Camacho
Signature: Alfonso Camacho
Date: Month 11 Day 03 Year 14

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.
Printed/Typed Name
Signature
Date: Month Day Year

NON-HAZARDOUS WASTE

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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

August 15, 2014

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: WWTP Baker Tank Overflow OrderNo.: 1408348

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/7/2014 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 **1408348**
Date Reported: **8/15/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-001 **Matrix:** PRODUCT

Client Sample ID: WWTP Dirty Sewer Spill
Collection Date: 8/5/2014 7:25:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
GRO BY 8015D						Analyst:	**NSB**
Gasoline Range Organics (GRO)	11	2.5		wt%	1	8/13/2014 1:26:49 AM	14675
Surr: BFB	137	75.3-119	S	%REC	1	8/13/2014 1:26:49 AM	14675
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	50		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Toluene	760	100		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Ethylbenzene	880	100		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Xylenes, Total	6700	200		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Surr: 4-Bromofluorobenzene	126	76.8-126	S	%REC	40	8/13/2014 3:07:56 PM	14675

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-002 **Matrix:** PRODUCT

Client Sample ID: WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 4:10:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
GRO BY 8015D						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	2.5		wt%	1	8/13/2014 2:24:05 AM	14707
Surr: BFB	94.6	75.3-119		%REC	1	8/13/2014 2:24:05 AM	14707
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	50		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Toluene	ND	100		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Ethylbenzene	ND	100		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Xylenes, Total	ND	200		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Surr: 4-Bromofluorobenzene	109	76.8-126		%REC	40	8/13/2014 3:36:35 PM	14707

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-003 **Matrix:** SLUDGE

Client Sample ID: B #1 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 3:30:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DJF**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Surr: BFB	94.0	80-120		%REC	1	8/11/2014 5:56:02 PM	14669
EPA METHOD 8021B: VOLATILES						Analyst:	**DJF**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Xylenes, Total	ND	0.10		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/11/2014 5:56:02 PM	14669
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	8/13/2014 3:25:24 PM	14746
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:48:30 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 10:09:49 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 10:09:49 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 10:09:49 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 10:09:49 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 10:09:49 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 10:09:49 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 10:09:49 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 10:09:49 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 10:09:49 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
Surr: 2-Fluorophenol	72.6	25-105		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: Phenol-d5	55.5	22.3-70.3		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: 2,4,6-Tribromophenol	80.7	30.4-134		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: Nitrobenzene-d5	114	54.8-128		%REC	1	8/14/2014 10:09:49 AM	14725

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-003 **Matrix:** SLUDGE

Client Sample ID: B #1 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 3:30:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
Surr: 2-Fluorobiphenyl	121	53.3-122		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: 4-Terphenyl-d14	102	51.8-133		%REC	1	8/14/2014 10:09:49 AM	14725
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**KJH**
Benzene	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
2-Butanone	ND	200		ppm	10	8/12/2014 6:20:33 PM	14669
Carbon tetrachloride	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
Chlorobenzene	ND	100		ppm	10	8/12/2014 6:20:33 PM	14669
Chloroform	ND	6.0		ppm	10	8/12/2014 6:20:33 PM	14669
1,4-Dichlorobenzene	ND	7.5		ppm	10	8/12/2014 6:20:33 PM	14669
1,1-Dichloroethene	ND	0.70		ppm	10	8/12/2014 6:20:33 PM	14669
Tetrachloroethene (PCE)	ND	0.70		ppm	10	8/12/2014 6:20:33 PM	14669
Trichloroethene (TCE)	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
Vinyl chloride	ND	0.20		ppm	10	8/12/2014 6:20:33 PM	14669
mp-Xylenes	ND	0.50		mg/Kg	10	8/12/2014 6:20:33 PM	14669
o-Xylene	ND	0.50		mg/Kg	10	8/12/2014 6:20:33 PM	14669
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	10	8/12/2014 6:20:33 PM	14669
Surr: 4-Bromofluorobenzene	89.2	70-130		%REC	10	8/12/2014 6:20:33 PM	14669
Surr: Dibromofluoromethane	96.1	70-130		%REC	10	8/12/2014 6:20:33 PM	14669
Surr: Toluene-d8	94.0	70-130		%REC	10	8/12/2014 6:20:33 PM	14669

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-004 **Matrix:** SLUDGE

Client Sample ID: B #2 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 1:40:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DJF**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Surr: BFB	92.5	80-120		%REC	1	8/11/2014 6:53:24 PM	14669
EPA METHOD 8021B: VOLATILES						Analyst:	**DJF**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Xylenes, Total	ND	0.10		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	8/11/2014 6:53:24 PM	14669
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	8/13/2014 3:30:42 PM	14746
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:49:45 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 10:38:43 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 10:38:43 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 10:38:43 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 10:38:43 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 10:38:43 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 10:38:43 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 10:38:43 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 10:38:43 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 10:38:43 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
Surr: 2-Fluorophenol	24.2	25-105	S	%REC	1	8/14/2014 10:38:43 AM	14725
Surr: Phenol-d5	33.1	22.3-70.3		%REC	1	8/14/2014 10:38:43 AM	14725
Surr: 2,4,6-Tribromophenol	30.2	30.4-134	S	%REC	1	8/14/2014 10:38:43 AM	14725
Surr: Nitrobenzene-d5	105	54.8-128		%REC	1	8/14/2014 10:38:43 AM	14725

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-004 **Matrix:** SLUDGE

Client Sample ID: B #2 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 1:40:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
Surr: 2-Fluorobiphenyl	101	53.3-122		%REC	1	8/14/2014 10:38:43 AM	14725
Surr: 4-Terphenyl-d14	84.0	51.8-133		%REC	1	8/14/2014 10:38:43 AM	14725
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**KJH**
Benzene	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
2-Butanone	ND	200		ppm	10	8/12/2014 6:48:31 PM	14669
Carbon tetrachloride	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
Chlorobenzene	ND	100		ppm	10	8/12/2014 6:48:31 PM	14669
Chloroform	ND	6.0		ppm	10	8/12/2014 6:48:31 PM	14669
1,4-Dichlorobenzene	ND	7.5		ppm	10	8/12/2014 6:48:31 PM	14669
1,1-Dichloroethene	ND	0.70		ppm	10	8/12/2014 6:48:31 PM	14669
Tetrachloroethene (PCE)	ND	0.70		ppm	10	8/12/2014 6:48:31 PM	14669
Trichloroethene (TCE)	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
Vinyl chloride	ND	0.20		ppm	10	8/12/2014 6:48:31 PM	14669
mp-Xylenes	ND	0.50		mg/Kg	10	8/12/2014 6:48:31 PM	14669
o-Xylene	ND	0.50		mg/Kg	10	8/12/2014 6:48:31 PM	14669
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	10	8/12/2014 6:48:31 PM	14669
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	10	8/12/2014 6:48:31 PM	14669
Surr: Dibromofluoromethane	96.3	70-130		%REC	10	8/12/2014 6:48:31 PM	14669
Surr: Toluene-d8	92.9	70-130		%REC	10	8/12/2014 6:48:31 PM	14669

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-005 **Matrix:** SLUDGE

Client Sample ID: B #3 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 3:50:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	50	5.0		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Surr: BFB	211	80-120	S	%REC	1	8/12/2014 1:59:11 PM	14669
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Ethylbenzene	0.14	0.050		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Xylenes, Total	1.8	0.10		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Surr: 4-Bromofluorobenzene	120	80-120		%REC	1	8/12/2014 1:59:11 PM	14669
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	8/13/2014 3:32:29 PM	14746
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:50:57 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 11:07:49 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 11:07:49 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 11:07:49 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 11:07:49 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 11:07:49 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 11:07:49 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 11:07:49 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 11:07:49 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 11:07:49 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
Surr: 2-Fluorophenol	68.7	25-105		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: Phenol-d5	47.8	22.3-70.3		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: 2,4,6-Tribromophenol	90.8	30.4-134		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: Nitrobenzene-d5	102	54.8-128		%REC	1	8/14/2014 11:07:49 AM	14725

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-005 **Matrix:** SLUDGE

Client Sample ID: B #3 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 3:50:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
Surr: 2-Fluorobiphenyl	95.5	53.3-122		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: 4-Terphenyl-d14	86.2	51.8-133		%REC	1	8/14/2014 11:07:49 AM	14725
VOLATILES BY 8260B/1311						Analyst:	**KJH**
Benzene	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
2-Butanone	ND	200		mg/L	1	8/12/2014 2:07:04 PM	14698
Carbon Tetrachloride	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
Chlorobenzene	ND	100		mg/L	1	8/12/2014 2:07:04 PM	14698
Chloroform	ND	6.0		mg/L	1	8/12/2014 2:07:04 PM	14698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/12/2014 2:07:04 PM	14698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
1,1-Dichloroethene	ND	0.70		mg/L	1	8/12/2014 2:07:04 PM	14698
Hexachlorobutadiene	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/12/2014 2:07:04 PM	14698
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
Vinyl chloride	ND	0.20		mg/L	1	8/12/2014 2:07:04 PM	14698
Surr: 1,2-Dichloroethane-d4	92.3	69.9-130		%REC	1	8/12/2014 2:07:04 PM	14698
Surr: 4-Bromofluorobenzene	89.2	71.2-123		%REC	1	8/12/2014 2:07:04 PM	14698
Surr: Dibromofluoromethane	94.6	73.9-134		%REC	1	8/12/2014 2:07:04 PM	14698
Surr: Toluene-d8	94.2	81.9-122		%REC	1	8/12/2014 2:07:04 PM	14698

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-006 **Matrix:** SLUDGE

Client Sample ID: B #4 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 4:00:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Surr: BFB	118	80-120		%REC	1	8/12/2014 2:27:53 PM	14669
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Xylenes, Total	ND	0.10		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	8/12/2014 2:27:53 PM	14669
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	8/13/2014 3:34:17 PM	14746
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:52:13 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 11:36:51 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 11:36:51 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 11:36:51 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 11:36:51 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 11:36:51 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 11:36:51 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 11:36:51 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 11:36:51 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 11:36:51 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
Surr: 2-Fluorophenol	80.0	25-105		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: Phenol-d5	54.8	22.3-70.3		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: 2,4,6-Tribromophenol	94.4	30.4-134		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: Nitrobenzene-d5	113	54.8-128		%REC	1	8/14/2014 11:36:51 AM	14725

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-006 **Matrix:** SLUDGE

Client Sample ID: B #4 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 4:00:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
Surr: 2-Fluorobiphenyl	112	53.3-122		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: 4-Terphenyl-d14	93.2	51.8-133		%REC	1	8/14/2014 11:36:51 AM	14725
VOLATILES BY 8260B/1311						Analyst:	**KJH**
Benzene	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
2-Butanone	ND	200		mg/L	1	8/12/2014 3:31:35 PM	14698
Carbon Tetrachloride	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
Chlorobenzene	ND	100		mg/L	1	8/12/2014 3:31:35 PM	14698
Chloroform	ND	6.0		mg/L	1	8/12/2014 3:31:35 PM	14698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/12/2014 3:31:35 PM	14698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
1,1-Dichloroethene	ND	0.70		mg/L	1	8/12/2014 3:31:35 PM	14698
Hexachlorobutadiene	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/12/2014 3:31:35 PM	14698
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
Vinyl chloride	ND	0.20		mg/L	1	8/12/2014 3:31:35 PM	14698
Surr: 1,2-Dichloroethane-d4	93.4	69.9-130		%REC	1	8/12/2014 3:31:35 PM	14698
Surr: 4-Bromofluorobenzene	89.2	71.2-123		%REC	1	8/12/2014 3:31:35 PM	14698
Surr: Dibromofluoromethane	97.5	73.9-134		%REC	1	8/12/2014 3:31:35 PM	14698
Surr: Toluene-d8	92.2	81.9-122		%REC	1	8/12/2014 3:31:35 PM	14698

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-007 **Matrix:** SLUDGE

Client Sample ID: B #5 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 4:05:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Surr: BFB	* 111	80-120		%REC	1	8/12/2014 2:56:33 PM	14669
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Xylenes, Total	0.35	0.10		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	8/12/2014 2:56:33 PM	14669
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	8/13/2014 3:36:06 PM	14746
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:58:13 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
Phenol	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 12:05:53 PM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 12:05:53 PM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 12:05:53 PM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 12:05:53 PM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 12:05:53 PM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 12:05:53 PM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 12:05:53 PM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 12:05:53 PM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 12:05:53 PM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
Surr: 2-Fluorophenol	77.5	25-105		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: Phenol-d5	53.9	22.3-70.3		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: 2,4,6-Tribromophenol	88.8	30.4-134		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: Nitrobenzene-d5	103	54.8-128		%REC	1	8/14/2014 12:05:53 PM	14725

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1408348-007 **Matrix:** SLUDGE

Client Sample ID: B #5 WWTP Dirty Sewer Spill
Collection Date: 8/6/2014 4:05:00 PM
Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
Surr: 2-Fluorobiphenyl	99.7	53.3-122		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: 4-Terphenyl-d14	94.7	51.8-133		%REC	1	8/14/2014 12:05:53 PM	14725
VOLATILES BY 8260B/1311						Analyst:	**KJH**
Benzene	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
2-Butanone	ND	200		mg/L	1	8/12/2014 3:59:54 PM	14698
Carbon Tetrachloride	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
Chlorobenzene	ND	100		mg/L	1	8/12/2014 3:59:54 PM	14698
Chloroform	ND	6.0		mg/L	1	8/12/2014 3:59:54 PM	14698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/12/2014 3:59:54 PM	14698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
1,1-Dichloroethene	ND	0.70		mg/L	1	8/12/2014 3:59:54 PM	14698
Hexachlorobutadiene	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/12/2014 3:59:54 PM	14698
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
Vinyl chloride	ND	0.20		mg/L	1	8/12/2014 3:59:54 PM	14698
Surr: 1,2-Dichloroethane-d4	95.3	69.9-130		%REC	1	8/12/2014 3:59:54 PM	14698
Surr: 4-Bromofluorobenzene	92.3	71.2-123		%REC	1	8/12/2014 3:59:54 PM	14698
Surr: Dibromofluoromethane	97.9	73.9-134		%REC	1	8/12/2014 3:59:54 PM	14698
Surr: Toluene-d8	94.4	81.9-122		%REC	1	8/12/2014 3:59:54 PM	14698

Refer to the QC Summary report and 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		

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	140812044
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1408348
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	140812044-001	**Date/Time Received**	8/12/2014 12:40 PM
Client Sample ID	1408348-003B / B #1 WWTP DIRTY SEWER SPILL	**Sampling Date**	8/6/2014
Matrix	Solid	**Sampling Time**	3:30 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.241	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	8.70	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	ND	mg/kg	36.2	8/14/2014	HSW	SW846 CH7	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	140812044
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1408348
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	140812044-002	**Date/Time Received**	8/12/2014 12:40 PM
Client Sample ID	1408348-004B / B #2 WWTP DIRTY SEWER SPILL	**Sampling Date**	8/6/2014
Matrix	Solid	**Sampling Time**	1:40 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.237	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	8.74	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	37.4	mg/kg	23.7	8/14/2014	HSW	SW846 CH7	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0026; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	140812044
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1408348
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	140812044-003	**Date/Time Received**	8/12/2014 12:40 PM
Client Sample ID	1408348-005B / B #3 WWTP DIRTY SEWER SPILL	**Sampling Date**	8/6/2014
Matrix	Solid	**Sampling Time**	3:50 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.226	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	9.18	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	36.2	mg/kg	22.6	8/14/2014	HSW	SW846 CH7	

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	140812044
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1408348
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	140812044-004	**Date/Time Received**	8/12/2014 12:40 PM
Client Sample ID	1408348-006B / B #4 WWTP DIRTY SEWER SPILL	**Sampling Date**	8/6/2014
Matrix	Solid	**Sampling Time**	4:00 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.189	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	8.64	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	30.2	mg/kg	18.9	8/14/2014	HSW	SW846 CH7	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report

Sample Number 140812044-005
Client Sample ID 1408348-007B / B #5 WWTP DIRTY SEWER SPILL
Matrix Solid
Comments Sample results reported as received.

Date/Time Received 8/12/2014 12:40 PM
Sampling Date 8/6/2014
Sampling Time 4:05 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	0.214	mg/Kg	0.191	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	9.18	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	ND	mg/kg	23.3	8/14/2014	HSW	SW846 CH7	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report
Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Reactive sulfide	0.140	mg/kg	0.2	70.0	70-130	8/14/2014	8/14/2014
Cyanide (reactive)	0.510	mg/kg	0.5	102.0	90-110	8/14/2014	8/14/2014

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
140812044-002	Reactive sulfide	37.4	171	mg/kg	200	66.8	70-130	8/14/2014	8/14/2014
140812044-005	Cyanide (reactive)	0.214	9.69	mg/kg	9.55	99.2	80-120	8/14/2014	8/14/2014

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide (reactive)	9.49	mg/kg	9.55	97.1	2.1	0-25	8/14/2014	8/14/2014

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide (reactive)	ND	mg/Kg	1	8/14/2014	8/14/2014
Reactive sulfide	ND	mg/kg	1	8/14/2014	8/14/2014

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87693; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-14675** SampType: **MBLK** TestCode: **GRO by 8015D**
Client ID: **PBW** Batch ID: **14675** RunNo: **20517**
Prep Date: **8/8/2014** Analysis Date: **8/12/2014** SeqNo: **597191** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	2.5								
Surr: BFB	950		1000		94.7	75.3	119			

Sample ID **LCS-14675** SampType: **LCS** TestCode: **GRO by 8015D**
Client ID: **LCSW** Batch ID: **14675** RunNo: **20517**
Prep Date: **8/8/2014** Analysis Date: **8/12/2014** SeqNo: **597192** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	2.5	25.00	0	124	78.5	121			S
Surr: BFB	1000		1000		103	75.3	119			

Sample ID **LCSD-14675** SampType: **LCSD** TestCode: **GRO by 8015D**
Client ID: **LCSS02** Batch ID: **14675** RunNo: **20517**
Prep Date: **8/8/2014** Analysis Date: **8/12/2014** SeqNo: **597193** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	2.5	25.00	0	122	78.5	121	1.43	8.39	S
Surr: BFB	1000		1000		102	75.3	119	0	0	

Sample ID **MB-14707** SampType: **MBLK** TestCode: **GRO by 8015D**
Client ID: **PBW** Batch ID: **14707** RunNo: **20517**
Prep Date: **8/11/2014** Analysis Date: **8/13/2014** SeqNo: **597222** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	2.5								
Surr: BFB	940		1000		94.1	75.3	119			

Sample ID **LCS-14707** SampType: **LCS** TestCode: **GRO by 8015D**
Client ID: **LCSW** Batch ID: **14707** RunNo: **20517**
Prep Date: **8/11/2014** Analysis Date: **8/13/2014** SeqNo: **597223** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	2.5	25.00	0	117	78.5	121			
Surr: BFB	1000		1000		102	75.3	119			

Sample ID **LCSD-14707** SampType: **LCSD** TestCode: **GRO by 8015D**
Client ID: **LCSS02** Batch ID: **14707** RunNo: **20517**
Prep Date: **8/11/2014** Analysis Date: **8/13/2014** SeqNo: **597224** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **LCSD-14707**	SampType: **LCSD**		TestCode: **GRO by 8015D**		
Client ID: **LCSS02**	Batch ID: **14707**		RunNo: **20517**		
Prep Date: **8/11/2014**	Analysis Date: **8/13/2014**		SeqNo: **597224**	Units: **wt%**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	2.5	25.00	0	122	78.5	121	4.09	8.39	S
Surr: BFB	1000		1000		103	75.3	119	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-14669** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **14669** RunNo: **20505**
Prep Date: **8/8/2014** Analysis Date: **8/11/2014** SeqNo: **596079** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.6	80	120			

Sample ID **LCS-14669** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **14669** RunNo: **20505**
Prep Date: **8/8/2014** Analysis Date: **8/11/2014** SeqNo: **596080** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	119	65.8	139			
Surr: BFB	1000		1000		102	80	120			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **R20546** RunNo: **20546**
Prep Date: Analysis Date: **8/13/2014** SeqNo: **597802** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.1	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **R20546** RunNo: **20546**
Prep Date: Analysis Date: **8/13/2014** SeqNo: **597803** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.5	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-14675** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBW** Batch ID: **14675** RunNo: **20517**

Prep Date: **8/8/2014** Analysis Date: **8/12/2014** SeqNo: **597253** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.5								
Toluene	ND	2.5								
Ethylbenzene	ND	2.5								
Xylenes, Total	ND	5.0								
m,p-Xylene	ND	2.5								
o-Xylene	ND	2.5								
Surr: 4-Bromofluorobenzene	54		50.00		107	76.8	126			

Sample ID **LCS-14675** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSW** Batch ID: **14675** RunNo: **20517**

Prep Date: **8/8/2014** Analysis Date: **8/13/2014** SeqNo: **597254** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	49	2.5	50.00	0	98.2	70.4	134			
Toluene	48	2.5	50.00	0	95.8	69.7	129			
Ethylbenzene	49	2.5	50.00	0	97.2	73	127			
Xylenes, Total	150	5.0	150.0	0	97.5	75.5	126			
m,p-Xylene	98	2.5	100.0	0	98.5	75.5	128			
o-Xylene	48	2.5	50.00	0	95.4	75.3	121			
Surr: 4-Bromofluorobenzene	53		50.00		106	76.8	126			

Sample ID **LCSD-14675** SampType: **LCSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS02** Batch ID: **14675** RunNo: **20517**

Prep Date: **8/8/2014** Analysis Date: **8/13/2014** SeqNo: **597255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	48	2.5	50.00	0	96.8	70.4	134	1.39	27	
Toluene	48	2.5	50.00	0	96.0	69.7	129	0.155	19	
Ethylbenzene	49	2.5	50.00	0	98.0	73	127	0.773	10	
Xylenes, Total	150	5.0	150.0	0	97.2	75.5	126	0.274	13	
m,p-Xylene	98	2.5	100.0	0	98.4	75.5	128	0	0	
o-Xylene	47	2.5	50.00	0	94.8	75.3	121	0	0	
Surr: 4-Bromofluorobenzene	54		50.00		108	76.8	126	0	0	

Sample ID **MB-14707** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBW** Batch ID: **14707** RunNo: **20517**

Prep Date: **8/11/2014** Analysis Date: **8/13/2014** SeqNo: **597257** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.5								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-14707** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBW** Batch ID: **14707** RunNo: **20517**

Prep Date: **8/11/2014** Analysis Date: **8/13/2014** SeqNo: **597257** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	2.5								
Ethylbenzene	ND	2.5								
Xylenes, Total	ND	5.0								
m,p-Xylene	ND	2.5								
o-Xylene	ND	2.5								
Surr: 4-Bromofluorobenzene	53		50.00		105	76.8	126			

Sample ID **LCS-14707** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSW** Batch ID: **14707** RunNo: **20533**

Prep Date: **8/11/2014** Analysis Date: **8/12/2014** SeqNo: **597341** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	50.00	0	86.2	70.4	134			
Toluene	42	2.5	50.00	0	84.8	69.7	129			
Ethylbenzene	43	2.5	50.00	0	86.3	73	127			
Xylenes, Total	140	5.0	150.0	0	90.8	75.5	126			
m,p-Xylene	92	2.5	100.0	0	91.8	75.5	128			
o-Xylene	44	2.5	50.00	0	88.8	75.3	121			
Surr: 4-Bromofluorobenzene	48		50.00		95.3	76.8	126			

Sample ID **LCSD-14707** SampType: **LCSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS02** Batch ID: **14707** RunNo: **20533**

Prep Date: **8/11/2014** Analysis Date: **8/12/2014** SeqNo: **597342** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	40	2.5	50.00	0	80.3	70.4	134	7.08	27	
Toluene	39	2.5	50.00	0	78.9	69.7	129	7.31	19	
Ethylbenzene	40	2.5	50.00	0	80.4	73	127	7.03	10	
Xylenes, Total	130	5.0	150.0	0	85.3	75.5	126	6.26	13	
m,p-Xylene	86	2.5	100.0	0	86.3	75.5	128	0	0	
o-Xylene	42	2.5	50.00	0	83.2	75.3	121	0	0	
Surr: 4-Bromofluorobenzene	53		50.00		106	76.8	126	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-14669** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **14669** RunNo: **20505**

Prep Date: **8/8/2014** Analysis Date: **8/11/2014** SeqNo: **596101** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID **LCS-14669** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **14669** RunNo: **20505**

Prep Date: **8/8/2014** Analysis Date: **8/11/2014** SeqNo: **596102** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.96	0.10	1.000	0	95.6	80	120			
Benzene	0.97	0.050	1.000	0	96.7	80	120			
Toluene	0.96	0.050	1.000	0	95.8	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **R20546** RunNo: **20546**

Prep Date: Analysis Date: **8/13/2014** SeqNo: **597832** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **R20546** RunNo: **20546**

Prep Date: Analysis Date: **8/13/2014** SeqNo: **597833** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **mb-14669** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **PBS** Batch ID: **14669** RunNo: **20527**

Prep Date: **8/8/2014** Analysis Date: **8/12/2014** SeqNo: **596917** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
mp-Xylenes	ND	0.050								
o-Xylene	ND	0.050								
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.5	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		81.7	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.7	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID **lcs-14669** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **LCSS** Batch ID: **14669** RunNo: **20527**

Prep Date: **8/8/2014** Analysis Date: **8/12/2014** SeqNo: **596918** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.4	70	130			
Chlorobenzene	0.96	0.050	1.000	0	96.5	70	130			
1,1-Dichloroethene	0.95	0.070	1.000	0	94.8	60.5	160			
Trichloroethene (TCE)	0.96	0.050	1.000	0	96.0	58.8	139			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.0	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.8	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.9	70	130			
Surr: Toluene-d8	0.47		0.5000		93.1	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **lcs-14656** SampType: **LCS** TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS** Batch ID: **14656** RunNo: **20527**
Prep Date: **8/7/2014** Analysis Date: **8/12/2014** SeqNo: **596903** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		96.7	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2000		89.6	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2000		97.9	73.9	134			
Surr: Toluene-d8	0.18		0.2000		92.4	81.9	122			

Sample ID **mb-14698** SampType: **MBLK** TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS** Batch ID: **14698** RunNo: **20527**
Prep Date: **8/11/2014** Analysis Date: **8/12/2014** SeqNo: **596907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	200								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		95.4	69.9	130			
Surr: 4-Bromofluorobenzene	0.17		0.2000		86.4	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2000		97.9	73.9	134			
Surr: Toluene-d8	0.18		0.2000		90.5	81.9	122			

Sample ID **1408348-005AMS** SampType: **MS** TestCode: **Volatiles by 8260B/1311**
Client ID: **B #3 WWTP Dirty Se** Batch ID: **14698** RunNo: **20527**
Prep Date: **8/11/2014** Analysis Date: **8/12/2014** SeqNo: **596910** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.22	0.10	0.4003	0	55.8	51.1	171			
Chlorobenzene	0.20	0.10	0.4003	0	50.6	36.1	191			
1,1-Dichloroethene	0.23	0.10	0.4003	0	56.3	49.1	162			
Trichloroethene (TCE)	0.21	0.10	0.4003	0	52.3	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.18		0.2002		92.3	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2002		90.0	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2002		99.2	73.9	134			
Surr: Toluene-d8	0.19		0.2002		93.6	81.9	122			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **1408348-005AMSD** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**

Client ID: **B #3 WWTP Dirty Se** Batch ID: **14698** RunNo: **20527**

Prep Date: **8/11/2014** Analysis Date: **8/12/2014** SeqNo: **596912** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.18	0.10	0.4003	0	45.2	51.1	171	21.0	20	RS
Chlorobenzene	0.17	0.10	0.4003	0	43.1	36.1	191	16.1	20	
1,1-Dichloroethene	0.19	0.10	0.4003	0	46.5	49.1	162	19.1	20	S
Trichloroethene (TCE)	0.18	0.10	0.4003	0	44.5	41.2	166	16.0	20	
Surr: 1,2-Dichloroethane-d4	0.19		0.2002		94.1	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	0.17		0.2002		86.0	71.2	123	0	0	
Surr: Dibromofluoromethane	0.20		0.2002		99.2	73.9	134	0	0	
Surr: Toluene-d8	0.19		0.2002		93.9	81.9	122	0	0	

Sample ID **lcs-14698** SampType: **LCS** TestCode: **Volatiles by 8260B/1311**

Client ID: **LCSS** Batch ID: **14698** RunNo: **20527**

Prep Date: **8/11/2014** Analysis Date: **8/12/2014** SeqNo: **596957** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.45	0.10	0.4000	0	112	51.1	171			
Chlorobenzene	0.42	0.10	0.4000	0	105	36.1	191			
1,1-Dichloroethene	0.46	0.10	0.4000	0	116	49.1	162			
Trichloroethene (TCE)	0.44	0.10	0.4000	0	110	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		94.7	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2000		91.6	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2000		97.9	73.9	134			
Surr: Toluene-d8	0.19		0.2000		94.7	81.9	122			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **mb-14725** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**

Client ID: **PBS** Batch ID: **14725** RunNo: **20581**

Prep Date: **8/12/2014** Analysis Date: **8/14/2014** SeqNo: **598704** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.14		0.2000		69.7	25	105			
Surr: Phenol-d5	0.11		0.2000		53.4	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.20		0.2000		98.4	30.4	134			
Surr: Nitrobenzene-d5	0.10		0.1000		99.6	54.8	128			
Surr: 2-Fluorobiphenyl	0.096		0.1000		96.1	53.3	122			
Surr: 4-Terphenyl-d14	0.087		0.1000		87.3	51.8	133			

Sample ID **lcs-14725** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**

Client ID: **LCSS** Batch ID: **14725** RunNo: **20581**

Prep Date: **8/12/2014** Analysis Date: **8/14/2014** SeqNo: **598705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.10	0.010	0.1000	0	104	52.2	95.7			S
3+4-Methylphenol	0.25	0.010	0.2000	0	126	52.4	142			
2,4-Dinitrotoluene	0.097	0.010	0.1000	0	97.1	43.4	110			
Hexachlorobenzene	0.083	0.010	0.1000	0	83.1	43.6	88.4			
Hexachlorobutadiene	0.067	0.010	0.1000	0	67.4	38.6	88.4			
Hexachloroethane	0.084	0.010	0.1000	0	84.0	45.7	83.6			S
Nitrobenzene	0.11	0.010	0.1000	0	111	51.9	112			
Pentachlorophenol	0.087	0.010	0.1000	0	87.4	15.2	81.5			S
Pyridine	0.015	0.010	0.1000	0	14.8	11.2	95.1			
2,4,5-Trichlorophenol	0.088	0.010	0.1000	0	88.4	46.9	110			
2,4,6-Trichlorophenol	0.089	0.010	0.1000	0	88.6	36.1	111			
Cresols, Total	0.36	0.010	0.3000	0	119	30	136			
Surr: 2-Fluorophenol	0.17		0.2000		84.8	25	105			
Surr: Phenol-d5	0.12		0.2000		61.9	22.3	70.3			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **lcs-14725** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**

Client ID: **LCSS** Batch ID: **14725** RunNo: **20581**

Prep Date: **8/12/2014** Analysis Date: **8/14/2014** SeqNo: **598705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.23		0.2000		* 116	30.4	134			
Surr: Nitrobenzene-d5	0.11		0.1000		111	54.8	128			
Surr: 2-Fluorobiphenyl	0.11		0.1000		111	53.3	122			
Surr: 4-Terphenyl-d14	0.12		0.1000		116	51.8	133			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-14746** SampType: **MBLK** TestCode: **MERCURY, TCLP**
Client ID: **PBW** Batch ID: **14746** RunNo: **20553**
Prep Date: **8/13/2014** Analysis Date: **8/13/2014** SeqNo: **597726** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-14746** SampType: **LCS** TestCode: **MERCURY, TCLP**
Client ID: **LCSW** Batch ID: **14746** RunNo: **20553**
Prep Date: **8/13/2014** Analysis Date: **8/13/2014** SeqNo: **597727** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	101	80	120			

Sample ID **1408348-003AMS** SampType: **MS** TestCode: **MERCURY, TCLP**
Client ID: **B #1 WWTP Dirty Se** Batch ID: **14746** RunNo: **20553**
Prep Date: **8/13/2014** Analysis Date: **8/13/2014** SeqNo: **597729** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	97.7	75	125			

Sample ID **1408348-003AMSD** SampType: **MSD** TestCode: **MERCURY, TCLP**
Client ID: **B #1 WWTP Dirty Se** Batch ID: **14746** RunNo: **20553**
Prep Date: **8/13/2014** Analysis Date: **8/13/2014** SeqNo: **597730** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	101	75	125	0	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-14750** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **14750** RunNo: **20575**
Prep Date: **8/13/2014** Analysis Date: **8/14/2014** SeqNo: **598440** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID **LCS-14750** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **14750** RunNo: **20575**
Prep Date: **8/13/2014** Analysis Date: **8/14/2014** SeqNo: **598441** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	108	80	120			
Barium	ND	100	0.5000	0	94.3	80	120			
Cadmium	ND	1.0	0.5000	0	101	80	120			
Chromium	ND	5.0	0.5000	0	97.3	80	120			
Lead	ND	5.0	0.5000	0	94.1	80	120			
Selenium	ND	1.0	0.5000	0	103	80	120			
Silver	ND	5.0	0.1000	0	90.8	80	120			

Sample ID **1408348-006AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **B #4 WWTP Dirty Se** Batch ID: **14750** RunNo: **20575**
Prep Date: **8/13/2014** Analysis Date: **8/14/2014** SeqNo: **598446** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	104	75	125			
Barium	ND	100	0.5000	1.022	93.1	75	125			
Cadmium	ND	1.0	0.5000	0	96.4	75	125			
Chromium	ND	5.0	0.5000	0	89.6	75	125			
Lead	ND	5.0	0.5000	0.004500	85.5	75	125			
Selenium	ND	1.0	0.5000	0	90.0	75	125			
Silver	ND	5.0	0.1000	0	87.2	75	125			

Sample ID **1408348-006AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **B #4 WWTP Dirty Se** Batch ID: **14750** RunNo: **20575**
Prep Date: **8/13/2014** Analysis Date: **8/14/2014** SeqNo: **598447** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	99.6	75	125	0	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408348**

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **1408348-006AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **B #4 WWTP Dirty Se** Batch ID: **14750** RunNo: **20575**

Prep Date: **8/13/2014** Analysis Date: **8/14/2014** SeqNo: **598447** Units: **mg/L**

Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	*	ND	100	0.5000	1.022	93.1	75	125 *	0	20	
Cadmium		ND	1.0	0.5000	0	94.8	75	125	0	20	
Chromium		ND	5.0	0.5000	0	87.6	75	125	0	20	
Lead		ND	5.0	0.5000	0.004500	83.7	75	125	0	20	
Selenium		ND	1.0	0.5000	0	87.5	75	125	0	20	
Silver		ND	5.0	0.1000	0	87.1	75	125	0	20	

Qualifiers:

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

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: **Western Refining Gallup** Work Order Number: **1408348** RcptNo: **1**

Received by/date: A.T. 08/07/14

Logged By: **Ashley Gallegos** 8/7/2014 4:20:00 PM

Completed By: **Ashley Gallegos** 8/7/2014 5:08:42 PM

Reviewed By: IO 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? Courier

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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western - Refining

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush _____

Project Name: WWTP Baker Tank Overflow

Project #: Dirty Sewer Spill

Project Manager: Beck Larsen

Sampler: CTI

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. 1408348	BTEX (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals	~~Oil & Grease~~		Air Bubbles (Y or N)
8/5/2014	19:25	~~H2O~~ Product	WWTP Dirty Sewer Spill	9 oz - 1	N/A	-001	X		X													
	AS 08/11/14																					
8/6/2014	16:10	~~H2O~~ Product	WWTP Dirty Sewer Spill	Liter - 1	N/A	-002	X		X											X		
8/6/2014	15:30	Soil	B # 1 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-003	X		X							X	X	X	X			
8/6/2014	13:40	Soil	B # 2 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-004	X		X							X	X	X	X			
8/6/2014	15:50	Soil	B # 3 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-005	X		X							X	X	X	X			
8/6/2014	16:00	Soil	B # 4 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-006	X		X							X	X	X	X			
8/6/2014	16:05	Soil	B # 5 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-007	X		X							X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
08-07-14	14:00	[signature]	[signature]	08/07/14	1620	
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

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

October 06, 2014

Beck Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: WWTP Baker Tank Overflow OrderNo.: 1409D84

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/26/2014 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 **1409D84**
Date Reported: **10/6/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1409D84-001 **Matrix:** SOIL

Client Sample ID: C # 12 .WWTP Dirty Sewer Spill
Collection Date: 9/25/2014 10:15:00 AM
Received Date: 9/26/2014 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	34	10		mg/Kg	1	9/30/2014 12:55:26 PM	15573
Surr: DNOP	82.5	57.9-140		%REC	1	9/30/2014 12:55:26 PM	15573
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/30/2014 1:31:44 PM	15572
Surr: BFB	88.5	80-120		%REC	1	9/30/2014 1:31:44 PM	15572
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/30/2014 1:31:44 PM	15572
Toluene	ND	0.050		mg/Kg	1	9/30/2014 1:31:44 PM	15572
Ethylbenzene	ND	0.050		mg/Kg	1	9/30/2014 1:31:44 PM	15572
Xylenes, Total	ND	0.10		mg/Kg	1	9/30/2014 1:31:44 PM	15572
Surr: 4-Bromofluorobenzene	92.1	80-120		%REC	1	9/30/2014 1:31:44 PM	15572
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	1600	75		mg/Kg	50	10/3/2014 10:37:00 PM	15625
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/30/2014 3:33:01 PM	15626
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	10/1/2014 9:20:52 AM	15621
Barium	ND	100		mg/L	1	10/1/2014 9:20:52 AM	15621
Cadmium	ND	1.0		mg/L	1	10/1/2014 9:20:52 AM	15621
Chromium	ND	5.0		mg/L	1	10/1/2014 9:20:52 AM	15621
Lead	ND	5.0		mg/L	1	10/1/2014 9:20:52 AM	15621
Selenium	ND	1.0		mg/L	1	10/1/2014 9:20:52 AM	15621
Silver	ND	5.0		mg/L	1	10/1/2014 11:31:12 AM	15621
EPA METHOD 8270C TCLP						Analyst:	**JDC**
2-Methylphenol	ND	200		mg/L	1	9/30/2014 5:29:00 PM	15627
3+4-Methylphenol	ND	200		mg/L	1	9/30/2014 5:29:00 PM	15627
Phenol	ND	200		mg/L	1	9/30/2014 5:29:00 PM	15627
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/30/2014 5:29:00 PM	15627
Hexachlorobenzene	ND	0.13		mg/L	1	9/30/2014 5:29:00 PM	15627
Hexachlorobutadiene	ND	0.50		mg/L	1	9/30/2014 5:29:00 PM	15627
Hexachloroethane	ND	3.0		mg/L	1	9/30/2014 5:29:00 PM	15627
Nitrobenzene	ND	2.0		mg/L	1	9/30/2014 5:29:00 PM	15627
Pentachlorophenol	ND	100		mg/L	1	9/30/2014 5:29:00 PM	15627
Pyridine	ND	5.0		mg/L	1	9/30/2014 5:29:00 PM	15627
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/30/2014 5:29:00 PM	15627
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/30/2014 5:29:00 PM	15627

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1409D84-001 **Matrix:** SOIL

Client Sample ID: C # 12 .WWTP Dirty Sewer Spill
Collection Date: 9/25/2014 10:15:00 AM
Received Date: 9/26/2014 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**JDC**
Cresols, Total	ND	200		mg/L	1	9/30/2014 5:29:00 PM	15627
Surr: 2-Fluorophenol	56.2	25-105		%REC	1	9/30/2014 5:29:00 PM	15627
Surr: Phenol-d5	50.6	22.3-70.3		%REC	1	9/30/2014 5:29:00 PM	15627
Surr: 2,4,6-Tribromophenol	37.0	30.4-134		%REC	1	9/30/2014 5:29:00 PM	15627
Surr: Nitrobenzene-d5	67.1	54.8-128		%REC	1	9/30/2014 5:29:00 PM	15627
Surr: 2-Fluorobiphenyl	63.2	53.3-122		%REC	1	9/30/2014 5:29:00 PM	15627
Surr: 4-Terphenyl-d14	71.8	51.8-133		%REC	1	9/30/2014 5:29:00 PM	15627
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	10/1/2014 4:41:48 AM	15572
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	10/1/2014 4:41:48 AM	15572
2-Butanone	ND	200		ppm	10	10/1/2014 4:41:48 AM	15572
Carbon tetrachloride	ND	0.50		ppm	10	10/1/2014 4:41:48 AM	15572
Chlorobenzene	ND	100		ppm	10	10/1/2014 4:41:48 AM	15572
Chloroform	ND	6.0		ppm	10	10/1/2014 4:41:48 AM	15572
1,4-Dichlorobenzene	ND	7.5		ppm	10	10/1/2014 4:41:48 AM	15572
1,1-Dichloroethene	ND	0.70		ppm	10	10/1/2014 4:41:48 AM	15572
Tetrachloroethene (PCE)	ND	0.70		ppm	10	10/1/2014 4:41:48 AM	15572
Trichloroethene (TCE)	ND	0.50		ppm	10	10/1/2014 4:41:48 AM	15572
Vinyl chloride	ND	0.20		ppm	10	10/1/2014 4:41:48 AM	15572
Surr: 1,2-Dichloroethane-d4	84.5	70-130		%REC	10	10/1/2014 4:41:48 AM	15572
Surr: 4-Bromofluorobenzene	89.6	70-130		%REC	10	10/1/2014 4:41:48 AM	15572
Surr: Dibromofluoromethane	79.2	70-130		%REC	10	10/1/2014 4:41:48 AM	15572
Surr: Toluene-d8	90.0	70-130		%REC	10	10/1/2014 4:41:48 AM	15572
EPA METHOD 418.1: TPH						Analyst:	**BCN**
Petroleum Hydrocarbons, TR	160	20		mg/Kg	1	9/30/2014 5:00:00 PM	15549

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1409D84-002 **Matrix:** SOIL

Client Sample ID: C # 13 .WWTP Dirty Sewer Spill
Collection Date: 9/25/2014 10:20:00 AM
Received Date: 9/26/2014 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	10	*	mg/Kg	1	9/30/2014 4:28:28 PM	15573
Surr: DNOP	123	57.9-140		%REC	1	9/30/2014 4:28:28 PM	15573
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/30/2014 2:57:39 PM	15572
Surr: BFB	88.7	80-120		%REC	1	9/30/2014 2:57:39 PM	15572
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	9/30/2014 2:57:39 PM	15572
Toluene	ND	0.050		mg/Kg	1	9/30/2014 2:57:39 PM	15572
Ethylbenzene	ND	0.050		mg/Kg	1	9/30/2014 2:57:39 PM	15572
Xylenes, Total	ND	0.10		mg/Kg	1	9/30/2014 2:57:39 PM	15572
Surr: 4-Bromofluorobenzene	93.8	80-120		%REC	1	9/30/2014 2:57:39 PM	15572
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	230	30		mg/Kg	20	9/30/2014 1:40:07 PM	15625
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	9/30/2014 3:34:50 PM	15626
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	10/1/2014 9:22:08 AM	15621
Barium	ND	100		mg/L	1	10/1/2014 9:22:08 AM	15621
Cadmium	ND	1.0		mg/L	1	10/1/2014 9:22:08 AM	15621
Chromium	ND	5.0		mg/L	1	10/1/2014 9:22:08 AM	15621
Lead	ND	5.0		mg/L	1	10/1/2014 9:22:08 AM	15621
Selenium	ND	1.0		mg/L	1	10/1/2014 9:22:08 AM	15621
Silver	ND	5.0		mg/L	1	10/1/2014 11:33:09 AM	15621
EPA METHOD 8270C TCLP						Analyst:	**JDC**
2-Methylphenol	ND	200		mg/L	1	9/30/2014 5:57:03 PM	15627
3+4-Methylphenol	ND	200		mg/L	1	9/30/2014 5:57:03 PM	15627
Phenol	ND	200		mg/L	1	9/30/2014 5:57:03 PM	15627
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/30/2014 5:57:03 PM	15627
Hexachlorobenzene	ND	0.13		mg/L	1	9/30/2014 5:57:03 PM	15627
Hexachlorobutadiene	ND	0.50		mg/L	1	9/30/2014 5:57:03 PM	15627
Hexachloroethane	ND	3.0		mg/L	1	9/30/2014 5:57:03 PM	15627
Nitrobenzene	ND	2.0		mg/L	1	9/30/2014 5:57:03 PM	15627
Pentachlorophenol	ND	100		mg/L	1	9/30/2014 5:57:03 PM	15627
Pyridine	ND	5.0		mg/L	1	9/30/2014 5:57:03 PM	15627
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/30/2014 5:57:03 PM	15627
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/30/2014 5:57:03 PM	15627

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1409D84-002 **Matrix:** SOIL

Client Sample ID: C # 13 .WWTP Dirty Sewer Spill
Collection Date: 9/25/2014 10:20:00 AM
Received Date: 9/26/2014 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**JDC**
Cresols, Total	ND	200		mg/L	1	9/30/2014 5:57:03 PM	15627
Surr: 2-Fluorophenol	74.3	25-105		%REC	1	9/30/2014 5:57:03 PM	15627
Surr: Phenol-d5	67.2	22.3-70.3		%REC	1	9/30/2014 5:57:03 PM	15627
Surr: 2,4,6-Tribromophenol	44.2	30.4-134		%REC	1	9/30/2014 5:57:03 PM	15627
Surr: Nitrobenzene-d5	82.4	54.8-128		%REC	1	9/30/2014 5:57:03 PM	15627
Surr: 2-Fluorobiphenyl	76.7	53.3-122		%REC	1	9/30/2014 5:57:03 PM	15627
Surr: 4-Terphenyl-d14	80.6	51.8-133		%REC	1	9/30/2014 5:57:03 PM	15627
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	10/1/2014 5:09:51 AM	15572
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	10/1/2014 5:09:51 AM	15572
2-Butanone	ND	200		ppm	10	10/1/2014 5:09:51 AM	15572
Carbon tetrachloride	ND	0.50		ppm	10	10/1/2014 5:09:51 AM	15572
Chlorobenzene	ND	100		ppm	10	10/1/2014 5:09:51 AM	15572
Chloroform	ND	6.0		ppm	10	10/1/2014 5:09:51 AM	15572
1,4-Dichlorobenzene	ND	7.5		ppm	10	10/1/2014 5:09:51 AM	15572
1,1-Dichloroethene	ND	0.70		ppm	10	10/1/2014 5:09:51 AM	15572
Tetrachloroethene (PCE)	ND	0.70		ppm	10	10/1/2014 5:09:51 AM	15572
Trichloroethene (TCE)	ND	0.50		ppm	10	10/1/2014 5:09:51 AM	15572
Vinyl chloride	ND	0.20		ppm	10	10/1/2014 5:09:51 AM	15572
Surr: 1,2-Dichloroethane-d4	83.8	70-130		%REC	10	10/1/2014 5:09:51 AM	15572
Surr: 4-Bromofluorobenzene	87.5	70-130		%REC	10	10/1/2014 5:09:51 AM	15572
Surr: Dibromofluoromethane	82.2	70-130		%REC	10	10/1/2014 5:09:51 AM	15572
Surr: Toluene-d8	87.4	70-130		%REC	10	10/1/2014 5:09:51 AM	15572
EPA METHOD 418.1: TPH						Analyst:	**BCN**
Petroleum Hydrocarbons, TR	92	20		mg/Kg	1	9/30/2014 5:00:00 PM	15549

Refer to the QC Summary report and 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		

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	140930020
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1409D84
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	140930020-001	**Sampling Date**	9/25/2014	**Date/Time Received**	9/30/2014	12:05 PM
Client Sample ID	1409D84-001B / C # 12 .WWTP DIRTY SEWER SPILL	**Sampling Time**	10:15 AM	**Extraction Date**		
		Sample Location				
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.241	10/2/2014	CRW	SW846 CH7	
Ignitability	Negative			10/1/2014	JWC	EPA 1030	
pH	9.31	ph Units		10/2/2014	KJS	EPA 9045	
Reactive sulfide	ND	mg/kg	24.1	10/3/2014	HSW	SW846 CH7	

Sample Number	140930020-002	**Sampling Date**	9/25/2014	**Date/Time Received**	9/30/2014	12:05 PM
Client Sample ID	1409D84-002B / C # 13 .WWTP DIRTY SEWER SPILL	**Sampling Time**	10:20 AM	**Extraction Date**		
		Sample Location				
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.239	10/2/2014	CRW	SW846 CH7	
Ignitability	Negative			10/1/2014	JWC	EPA 1030	
pH	9.15	ph Units		10/2/2014	KJS	EPA 9045	
Reactive sulfide	ND	mg/kg	23.9	10/3/2014	HSW	SW846 CH7	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87693; ID:ID00013; MT:CERT0026; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140930020
Project Name: 1409D84

Analytical Results Report
Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Reactive sulfide	0.160	mg/kg	0.2	80.0	80-120	10/3/2014	10/3/2014
Cyanide (reactive)	0.525	mg/kg	0.5	105.0	70-130	10/2/2014	10/2/2014

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
140930020-002	Reactive sulfide	ND	33.5	mg/kg	47.8	70.1	70-130	10/3/2014	10/3/2014
140930020-001	Cyanide (reactive)	ND	12.0	mg/kg	12.05	99.6	70-130	10/2/2014	10/2/2014

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide (reactive)	11.9	mg/kg	12.05	98.8	0.8	0-25	10/2/2014	10/2/2014

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide (reactive)	ND	mg/Kg	1	10/2/2014	10/2/2014
Reactive sulfide	ND	mg/kg	10	10/3/2014	10/3/2014

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	**MB-15625**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**15625**		RunNo:	**21569**					
Prep Date:	**9/30/2014**	Analysis Date:	**9/30/2014**		SeqNo:	**632031**	Units:	**mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								

Sample ID	**LCS-15625**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**15625**		RunNo:	**21569**					
Prep Date:	**9/30/2014**	Analysis Date:	**9/30/2014**		SeqNo:	**632032**	Units:	**mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	95.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-15549** SampType: **MBLK** TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS** Batch ID: **15549** RunNo: **21532**
Prep Date: **9/26/2014** Analysis Date: **9/30/2014** SeqNo: **630106** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-15549** SampType: **LCS** TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS** Batch ID: **15549** RunNo: **21532**
Prep Date: **9/26/2014** Analysis Date: **9/30/2014** SeqNo: **630107** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	119	80	120			

Sample ID **LCSD-15549** SampType: **LCSD** TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02** Batch ID: **15549** RunNo: **21532**
Prep Date: **9/26/2014** Analysis Date: **9/30/2014** SeqNo: **630108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	117	80	120	1.24	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15573** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **15573** RunNo: **21539**

Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **630649** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		106	57.9	140			

Sample ID **LCS-15573** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **15573** RunNo: **21539**

Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **630650** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.9	68.6	130			
Surr: DNOP	4.8		5.000		96.0	57.9	140			

Sample ID **1409D84-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **C # 12 .WWTP Dirty** Batch ID: **15573** RunNo: **21539**

Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	98	9.9	49.55	34.06	128	40.1	152			
Surr: DNOP	4.8		4.955		96.7	57.9	140			

Sample ID **1409D84-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range Organics**

Client ID: **C # 12 .WWTP Dirty** Batch ID: **15573** RunNo: **21539**

Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631365** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	94	10	50.51	34.06	119	40.1	152	3.44	32.1	
Surr: DNOP	4.8		5.051		94.1	57.9	140	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#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15572** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **15572** RunNo: **21540**

Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.9	80	120			

Sample ID **LCS-15572** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **15572** RunNo: **21540**

Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631090** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	65.8	139			
Surr: BFB	970		1000		97.0	80	120			

Sample ID **MB-15622** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **15622** RunNo: **21587**

Prep Date: **9/30/2014** Analysis Date: **10/1/2014** SeqNo: **632616** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.8	80	120			

Sample ID **LCS-15622** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **15622** RunNo: **21587**

Prep Date: **9/30/2014** Analysis Date: **10/1/2014** SeqNo: **632617** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.2	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **MB-15572** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **15572** RunNo: **21540**
Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631120** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.4	80	120			

Sample ID **LCS-15572** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **15572** RunNo: **21540**
Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631121** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	99.8	80	120			
Toluene	0.99	0.050	1.000	0	98.9	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.4	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID **1409D84-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **C # 12 .WWTP Dirty** Batch ID: **15572** RunNo: **21540**
Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631123** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	77.4	142			
Toluene	1.0	0.050	1.000	0	103	77	132			
Ethylbenzene	1.0	0.050	1.000	0	105	77.6	134			
Xylenes, Total	3.1	0.10	3.000	0	104	77.4	132			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	80	120			

Sample ID **1409D84-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **C # 12 .WWTP Dirty** Batch ID: **15572** RunNo: **21540**
Prep Date: **9/29/2014** Analysis Date: **9/30/2014** SeqNo: **631124** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	0.9960	0	103	77.4	142	0.901	20	
Toluene	1.0	0.050	0.9960	0	105	77	132	1.68	20	
Ethylbenzene	1.1	0.050	0.9960	0	106	77.6	134	0.886	20	
Xylenes, Total	3.2	0.10	2.988	0	106	77.4	132	1.42	20	
Surr: 4-Bromofluorobenzene	0.98		0.9960		98.7	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	**MB-15622**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**15622**		RunNo:	**21587**					
Prep Date:	**9/30/2014**	Analysis Date:	**10/1/2014**		SeqNo:	**632648**		Units:	**%REC**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		0.95		1.000		94.7	80	120			

Sample ID	**LCS-15622**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**15622**		RunNo:	**21587**					
Prep Date:	**9/30/2014**	Analysis Date:	**10/1/2014**		SeqNo:	**632649**		Units:	**%REC**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		1.0		1.000		101	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **mb-15572** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **PBS** Batch ID: **15572** RunNo: **21567**
Prep Date: **9/29/2014** Analysis Date: **10/1/2014** SeqNo: **632025** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050	*							
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		78.3	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		85.4	70	130			
Surr: Dibromofluoromethane	0.39		0.5000		78.6	70	130			
Surr: Toluene-d8	0.45		0.5000		89.7	70	130			

Sample ID **lcs-15572** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **LCSS** Batch ID: **15572** RunNo: **21567**
Prep Date: **9/29/2014** Analysis Date: **10/1/2014** SeqNo: **632026** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.1	70	130			
Chlorobenzene	0.92	0.010	1.000	0	92.5	70	130			
1,1-Dichloroethene	1.0	0.070	1.000	0	101	60.5	160			
Trichloroethene (TCE)	0.94	0.050	1.000	0	93.5	58.8	139			
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		77.7	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		85.0	70	130			
Surr: Dibromofluoromethane	0.40		0.5000		79.1	70	130			
Surr: Toluene-d8	0.44		0.5000		88.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **mb-15627** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**

Client ID: **PBS** Batch ID: **15627** RunNo: **21556**

Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631149** Units: **mg/L**

Analyte	Result *	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.12		0.2000		60.3	25	105			
Surr: Phenol-d5	0.11		0.2000		52.8	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		61.9	30.4	134			
Surr: Nitrobenzene-d5	0.071		0.1000		71.4	54.8	128			
Surr: 2-Fluorobiphenyl	0.077		0.1000		76.6	53.3	122			
Surr: 4-Terphenyl-d14	0.084		0.1000		84.1	51.8	133			

Sample ID **lcs-15627** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**

Client ID: **LCSS** Batch ID: **15627** RunNo: **21556**

Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631151** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.054	0.010	0.1000	0	54.4	52.2	95.7			
3+4-Methylphenol	0.12	0.010	0.2000	0	59.1	52.4	142			
2,4-Dinitrotoluene	0.051	0.010	0.1000	0	50.8	43.4	110			
Hexachlorobenzene	0.069	0.010	0.1000	0	69.4	43.6	88.4			
Hexachlorobutadiene	0.054	0.010	0.1000	0	54.0	38.6	88.4			
Hexachloroethane	0.056	0.010	0.1000	0	56.4	45.7	83.6			
Nitrobenzene	0.055	0.010	0.1000	0	55.3	51.9	112			
Pentachlorophenol	0.021	0.010	0.1000	0	21.2	15.2	81.5			
Pyridine	0.044	0.010	0.1000	0	43.8	11.2	95.1			
2,4,5-Trichlorophenol	0.062	0.010	0.1000	0	61.6	46.9	110			
2,4,6-Trichlorophenol	0.051	0.010	0.1000	0	50.9	36.1	111			
Cresols, Total	0.17	0.010	0.3000	0	57.5	30	136			
Surr: 2-Fluorophenol	0.10		0.2000		50.2	25	105			
Surr: Phenol-d5	0.093		0.2000		46.4	22.3	70.3			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **lcs-15627** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**

Client ID: **LCSS** Batch ID: **15627** RunNo: **21556**

Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631151** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.10		0.2000		50.4	30.4	134			
Surr: Nitrobenzene-d5	0.056		0.1000		55.9	54.8	128			
Surr: 2-Fluorobiphenyl	0.055		0.1000		54.8	53.3	122			
Surr: 4-Terphenyl-d14	0.074		0.1000		74.2	51.8	133			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15626** SampType: **MBLK** TestCode: **MERCURY, TCLP**

Client ID: **PBW** Batch ID: **15626** RunNo: **21549**

Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **630861** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-15626** SampType: **LCS** TestCode: **MERCURY, TCLP**

Client ID: **LCSW** Batch ID: **15626** RunNo: **21549**

Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **630862** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	106	80	120			

Sample ID **TCLP Fluid2 836** SampType: **MBLK** TestCode: **MERCURY, TCLP**

Client ID: **PBW** Batch ID: **15626** RunNo: **21549**

Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **630863** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D84**

06-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15621** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **PBW** Batch ID: **15621** RunNo: **21561**

Prep Date: **9/30/2014** Analysis Date: **10/1/2014** SeqNo: **631559** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID **LCS-15621** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **LCSW** Batch ID: **15621** RunNo: **21561**

Prep Date: **9/30/2014** Analysis Date: **10/1/2014** SeqNo: **631560** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	102	80	120			
Barium	ND	100	0.5000	0	93.2	80	120			
Cadmium	ND	1.0	0.5000	0	97.9	80	120			
Chromium	ND	5.0	0.5000	0	91.3	80	120			
Lead	ND	5.0	0.5000	0	91.6	80	120			
Selenium	ND	1.0	0.5000	0	105	80	120			
Silver	ND	5.0	0.1000	0	99.4	80	120			

Qualifiers:

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

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: Western Refining Gallup Work Order Number: 1409D84 RcptNo: 1

Received by/date: CB 09/26/14

Logged By: Lindsay Mangin 9/26/2014 2:50:00 PM

Completed By: Lindsay Mangin 9/26/2014 2:56:20 PM

Reviewed By: 09/30/27/14

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? Courier

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	2.3	Good	Yes			

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

Client: Western - Refining

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush _____

Project Name:

WWTP Baker Tank Overflow

Project #:

Dirty Sewer Spill

Project Manager:

Beck Larsen

Sampler: CTI

On Ice: Yes No

Sample Temperature: 2.2

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals	Oil & Grease
9/25/2014	10:15	Soil	C # 12 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-001	X		X	X						X	X	X	X	
9/25/2014	10:20	Soil	C # 13 .WWTP Dirty Sewer Spill	9 oz - 2	N/A	-002	X		X	X						X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
09-26-14	1201	Beck Larsen	[signature]	9/26/14	1200
9-26-14	1450	[signature]	Celina Sanon	09/26/14	1450

Remarks:

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

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

October 14, 2014

Thurman B. Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: WWTP Baker Tank Overflow OrderNo.: 1410350

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/8/2014 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

Analytical Report
Lab Order **1410350**
Date Reported: **10/14/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1410350-001 **Matrix:** SOIL

Client Sample ID: WWTP Dirty Sewer Spill
Collection Date: 10/7/2014 10:45:00 AM
Received Date: 10/8/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	440	99		mg/Kg	10	10/9/2014 9:34:11 PM	15769
Surr: DNOP	0	57.9-140	S	%REC	10	10/9/2014 9:34:11 PM	15769
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2014 11:16:10 PM	15760
Surr: BFB	92.3	80-120		%REC	1	10/9/2014 11:16:10 PM	15760
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.050		mg/Kg	1	10/9/2014 11:16:10 PM	15760
Toluene	ND	0.050		mg/Kg	1	10/9/2014 11:16:10 PM	15760
Ethylbenzene	ND	0.050		mg/Kg	1	10/9/2014 11:16:10 PM	15760
Xylenes, Total	ND	0.10		mg/Kg	1	10/9/2014 11:16:10 PM	15760
Surr: 4-Bromofluorobenzene	90.8	80-120		%REC	1	10/9/2014 11:16:10 PM	15760
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Chloride	94	30		mg/Kg	20	10/9/2014 12:14:37 PM	15819
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	10/10/2014 3:34:50 PM	15839
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	10/10/2014 11:44:47 AM	15831
Barium	ND	100		mg/L	1	10/10/2014 11:38:19 AM	15831
Cadmium	ND	1.0		mg/L	1	10/10/2014 11:38:19 AM	15831
Chromium	ND	5.0		mg/L	1	10/10/2014 11:38:19 AM	15831
Lead	ND	5.0		mg/L	1	10/10/2014 11:38:19 AM	15831
Selenium	ND	1.0		mg/L	1	10/10/2014 11:38:19 AM	15831
Silver	ND	5.0		mg/L	1	10/10/2014 11:38:19 AM	15831
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	10/13/2014 3:33:17 PM	15850
3+4-Methylphenol	ND	200		mg/L	1	10/13/2014 3:33:17 PM	15850
Phenol	ND	200		mg/L	1	10/13/2014 3:33:17 PM	15850
2,4-Dinitrotoluene	ND	0.13		mg/L	1	10/13/2014 3:33:17 PM	15850
Hexachlorobenzene	ND	0.13		mg/L	1	10/13/2014 3:33:17 PM	15850
Hexachlorobutadiene	ND	0.50		mg/L	1	10/13/2014 3:33:17 PM	15850
Hexachloroethane	ND	3.0		mg/L	1	10/13/2014 3:33:17 PM	15850
Nitrobenzene	ND	2.0		mg/L	1	10/13/2014 3:33:17 PM	15850
Pentachlorophenol	ND	100		mg/L	1	10/13/2014 3:33:17 PM	15850
Pyridine	ND	5.0		mg/L	1	10/13/2014 3:33:17 PM	15850
2,4,5-Trichlorophenol	ND	400		mg/L	1	10/13/2014 3:33:17 PM	15850
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	10/13/2014 3:33:17 PM	15850

Refer to the QC Summary report and 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: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow
Lab ID: 1410350-001 **Matrix:** SOIL

Client Sample ID: WWTP Dirty Sewer Spill
Collection Date: 10/7/2014 10:45:00 AM
Received Date: 10/8/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
Cresols, Total	ND	200		mg/L	1	10/13/2014 3:33:17 PM	15850
Surr: 2-Fluorophenol	57.2	25-105		%REC	1	10/13/2014 3:33:17 PM	15850
Surr: Phenol-d5	54.2	22.3-70.3		%REC	1	10/13/2014 3:33:17 PM	15850
Surr: 2,4,6-Tribromophenol	6.02	30.4-134	S	%REC	1	10/13/2014 3:33:17 PM	15850
Surr: Nitrobenzene-d5	69.3	54.8-128		%REC	1	10/13/2014 3:33:17 PM	15850
Surr: 2-Fluorobiphenyl	67.3	53.3-122		%REC	1	10/13/2014 3:33:17 PM	15850
Surr: 4-Terphenyl-d14	67.8	51.8-133		%REC	1	10/13/2014 3:33:17 PM	15850
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	10/9/2014 9:05:57 PM	15760
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	10/9/2014 9:05:57 PM	15760
2-Butanone	ND	200		ppm	10	10/9/2014 9:05:57 PM	15760
Carbon tetrachloride	ND	0.50		ppm	10	10/9/2014 9:05:57 PM	15760
Chlorobenzene	ND	100		ppm	10	10/9/2014 9:05:57 PM	15760
Chloroform	ND	6.0		ppm	10	10/9/2014 9:05:57 PM	15760
1,4-Dichlorobenzene	ND	7.5		ppm	10	10/9/2014 9:05:57 PM	15760
1,1-Dichloroethene	ND	0.70		ppm	10	10/9/2014 9:05:57 PM	15760
Tetrachloroethene (PCE)	ND	0.70		ppm	10	10/9/2014 9:05:57 PM	15760
Trichloroethene (TCE)	ND	0.50		ppm	10	10/9/2014 9:05:57 PM	15760
Vinyl chloride	ND	0.20		ppm	10	10/9/2014 9:05:57 PM	15760
Surr: 1,2-Dichloroethane-d4	84.5	70-130		%REC	10	10/9/2014 9:05:57 PM	15760
Surr: 4-Bromofluorobenzene	84.5	70-130		%REC	10	10/9/2014 9:05:57 PM	15760
Surr: Dibromofluoromethane	98.6	70-130		%REC	10	10/9/2014 9:05:57 PM	15760
Surr: Toluene-d8	89.7	70-130		%REC	10	10/9/2014 9:05:57 PM	15760
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	940	20		mg/Kg	1	10/10/2014 12:00:00 PM	15787

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

Qualifiers:

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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		

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	141009046
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1410350
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	141009046-001	**Sampling Date**	10/7/2014	**Date/Time Received**	10/9/2014 1:40 PM
Client Sample ID	1410350-001E / WWTP DIRTY SEWER SPILL	**Sampling Time**	10:45 AM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.249	10/13/2014	CRW	SW846 CH7	
Ignitability	Negative			10/13/2014	JWC	EPA 1030	
pH	8.75	ph Units		10/13/2014	KJS	EPA 9045	
Reactive sulfide	ND	mg/kg	24.9	10/13/2014	ETL	SW846 CH7	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87693; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C585
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 141009046
Project Name: 1410350

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Reactive sulfide	0.160	mg/kg	0.2	80.0	80-120	10/13/2014	10/13/2014
Cyanide (reactive)	0.516	mg/kg	0.5	103.2	70-130	10/13/2014	10/13/2014

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
141009046-001	Reactive sulfide	ND	39.8	mg/kg	49.8	79.9	70-130	10/13/2014	10/13/2014
141009046-001	Cyanide (reactive)	ND	12.4	mg/kg	12.45	99.6	70-130	10/13/2014	10/13/2014

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide (reactive)	12.7	mg/kg	12.45	102.0	2.4	0-25	10/13/2014	10/13/2014

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide (reactive)	ND	mg/Kg	1	10/13/2014	10/13/2014
Reactive sulfide	ND	mg/kg	10	10/13/2014	10/13/2014

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	**MB-15819**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**15819**		RunNo:	**21796**					
Prep Date:	**10/9/2014**	Analysis Date:	**10/9/2014**		SeqNo:	**640524**	Units:	**mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								

Sample ID	**LCS-15819**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**15819**		RunNo:	**21796**					
Prep Date:	**10/9/2014**	Analysis Date:	**10/9/2014**		SeqNo:	**640525**	Units:	**mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	90.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15787** SampType: **MBLK** TestCode: **EPA Method 418.1: TPH**

Client ID: **PBS** Batch ID: **15787** RunNo: **21766**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **639405** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-15787** SampType: **LCS** TestCode: **EPA Method 418.1: TPH**

Client ID: **LCSS** Batch ID: **15787** RunNo: **21766**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **639406** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	119	80	120			

Sample ID **LCSD-15787** SampType: **LCSD** TestCode: **EPA Method 418.1: TPH**

Client ID: **LCSS02** Batch ID: **15787** RunNo: **21766**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **639407** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	112	80	120	6.37	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410350

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-15769	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics
Client ID:	PBS	Batch ID:	15769	RunNo:	21735
Prep Date:	10/7/2014	Analysis Date:	10/8/2014	SeqNo:	638274
				Units:	mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.0		10.00		80.2	57.9	140			

Sample ID	LCS-15769	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics
Client ID:	LCSS	Batch ID:	15769	RunNo:	21735
Prep Date:	10/7/2014	Analysis Date:	10/8/2014	SeqNo:	638381
				Units:	mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	10	50.00	0	128	68.6	130			
Surr: DNOP	3.4		5.000		67.0	57.9	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410350

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15760** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **15760** RunNo: **21782**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640380** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.7	80	120			

Sample ID **LCS-15760** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **15760** RunNo: **21782**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640381** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	65.8	139			
Surr: BFB	970		1000		96.9	80	120			

Sample ID **MB-15821** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **15821** RunNo: **21847**

Prep Date: **10/9/2014** Analysis Date: **10/10/2014** SeqNo: **641956** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		89.0	80	120			

Sample ID **LCS-15821** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **15821** RunNo: **21847**

Prep Date: **10/9/2014** Analysis Date: **10/10/2014** SeqNo: **641957** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.3	80	120			

Sample ID **MB-15821 MK** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **R21847** RunNo: **21847**

Prep Date: Analysis Date: **10/10/2014** SeqNo: **641973** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		89.0	80	120			

Sample ID **LCS-15821 MK** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **R21847** RunNo: **21847**

Prep Date: Analysis Date: **10/10/2014** SeqNo: **641974** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.3	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15760** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **15760** RunNo: **21782**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		90.7	80	120			

Sample ID **LCS-15760** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **15760** RunNo: **21782**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.0	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.6	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.5	80	120			

Sample ID **MB-15821** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **15821** RunNo: **21847**

Prep Date: **10/9/2014** Analysis Date: **10/10/2014** SeqNo: **641998** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	80	120			

Sample ID **LCS-15821** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **15821** RunNo: **21847**

Prep Date: **10/9/2014** Analysis Date: **10/10/2014** SeqNo: **641999** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **mb-15760** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **PBS** Batch ID: **15760** RunNo: **21804**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640829** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		79.0	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.0	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.8	70	130			
Surr: Toluene-d8	0.45		0.5000		90.3	70	130			

Sample ID **lcs-15760** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **LCSS** Batch ID: **15760** RunNo: **21804**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640830** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.0	70	130			
Chlorobenzene	1.0	0.010	1.000	0	102	70	130			
1,1-Dichloroethene	0.92	0.070	1.000	0	92.2	60.5	160			
Trichloroethene (TCE)	0.95	0.050	1.000	0	94.7	58.8	139			
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		78.1	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		85.8	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.2	70	130			
Surr: Toluene-d8	0.45		0.5000		89.0	70	130			

Sample ID **1410350-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**

Client ID: **WWTP Dirty Sewer** Batch ID: **15760** RunNo: **21804**

Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640832** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.50	1.000	0	90.0	32.2	145			
Chlorobenzene	0.94	0.90	1.000	0	94.2	32.4	142			
1,1-Dichloroethene	0.64	0.60	1.000	0	64.3	32.6	155			
Trichloroethene (TCE)	0.93	0.50	1.000	0	92.9	29.2	150			
Surr: 1,2-Dichloroethane-d4	4.2		5.000		84.5	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup
Project: WWTP Baker Tank Overflow

Sample ID **1410350-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **WWTP Dirty Sewer** Batch ID: **15760** RunNo: **21804**
Prep Date: **10/8/2014** Analysis Date: **10/9/2014** SeqNo: **640832** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	4.3		5.000		86.8	70	130			
Surr: Dibromofluoromethane	4.9		5.000		98.3	70	130			
Surr: Toluene-d8	4.4		5.000		88.7	70	130			

Sample ID **1410350-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **WWTP Dirty Sewer** Batch ID: **15760** RunNo: **21804**
Prep Date: **10/8/2014** Analysis Date: **10/10/2014** SeqNo: **640833** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.50	0.9990	0	92.0	32.2	145	2.09	20	
Chlorobenzene	0.97	0.90	0.9990	0	97.0	32.4	142	2.90	20	
1,1-Dichloroethene	0.74	0.70	0.9990	0	74.4	32.6	155	14.6	20	
Trichloroethene (TCE)	0.93	0.50	0.9990	0	93.3	29.2	150	0.351	20	
Surr: 1,2-Dichloroethane-d4	4.3		4.995		85.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	4.4		4.995		88.6	70	130	0	0	
Surr: Dibromofluoromethane	4.8		4.995		97.1	70	130	0	0	
Surr: Toluene-d8	4.7		4.995		94.4	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **mb-15850** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**

Client ID: **PBS** Batch ID: **15850** RunNo: **21871**

Prep Date: **10/10/2014** Analysis Date: **10/13/2014** SeqNo: **642636** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.15		0.2000		74.5	25	105			
Surr: Phenol-d5	0.12		0.2000		61.0	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		58.4	30.4	134			
Surr: Nitrobenzene-d5	0.080		0.1000		79.9	54.8	128			
Surr: 2-Fluorobiphenyl	0.081		0.1000		80.7	53.3	122			
Surr: 4-Terphenyl-d14	0.076		0.1000		75.8	51.8	133			

Sample ID **lcs-15850** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**

Client ID: **LCSS** Batch ID: **15850** RunNo: **21871**

Prep Date: **10/10/2014** Analysis Date: **10/13/2014** SeqNo: **642637** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.069	0.010	0.1000	0	68.6	52.2	95.7			
3+4-Methylphenol	0.15	0.010	0.2000	0	77.1	52.4	142			
2,4-Dinitrotoluene	0.063	0.010	0.1000	0	62.7	43.4	110			
Hexachlorobenzene	0.080	0.010	0.1000	0	79.9	43.6	88.4			
Hexachlorobutadiene	0.064	0.010	0.1000	0	64.3	38.6	88.4			
Hexachloroethane	0.066	0.010	0.1000	0	66.1	45.7	83.6			
Nitrobenzene	0.079	0.010	0.1000	0	78.6	51.9	112			
Pentachlorophenol	0.046	0.010	0.1000	0	45.8	15.2	81.5			
Pyridine	0.052	0.010	0.1000	0	51.8	11.2	95.1			
2,4,5-Trichlorophenol	0.076	0.010	0.1000	0	76.1	46.9	110			
2,4,6-Trichlorophenol	0.065	0.010	0.1000	0	65.5	36.1	111			
Cresols, Total	0.22	0.010	0.3000	0	74.3	30	136			
Surr: 2-Fluorophenol	0.13		0.2000		65.4	25	105			
Surr: Phenol-d5	0.11		0.2000		55.4	22.3	70.3			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **lcs-15850**	SampType: **LCS**	TestCode: **EPA Method 8270C TCLP**	
Client ID: **LCSS**	Batch ID: **15850**	RunNo: **21871**	
Prep Date: **10/10/2014**	Analysis Date: **10/13/2014**	SeqNo: **642637**	Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.12		0.2000		60.9	30.4	134			
Surr: Nitrobenzene-d5	0.077		0.1000		76.8	54.8	128			
Surr: 2-Fluorobiphenyl	0.076		0.1000		76.3	53.3	122			
Surr: 4-Terphenyl-d14	0.075		0.1000		75.5	51.8	133			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410350**

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15839** SampType: **MBLK** TestCode: **MERCURY, TCLP**

Client ID: **PBW** Batch ID: **15839** RunNo: **21829**

Prep Date: **10/10/2014** Analysis Date: **10/10/2014** SeqNo: **641620** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-15839** SampType: **LCS** TestCode: **MERCURY, TCLP**

Client ID: **LCSW** Batch ID: **15839** RunNo: **21829**

Prep Date: **10/10/2014** Analysis Date: **10/10/2014** SeqNo: **641621** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	101	80	120			

Sample ID **TCLP Fluid1 #1460** SampType: **MBLK** TestCode: **MERCURY, TCLP**

Client ID: **PBW** Batch ID: **15839** RunNo: **21829**

Prep Date: **10/10/2014** Analysis Date: **10/10/2014** SeqNo: **641622** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410350

14-Oct-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID **MB-15831** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **PBW** Batch ID: **15831** RunNo: **21817**

Prep Date: **10/9/2014** Analysis Date: **10/10/2014** SeqNo: **641319** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID **LCS-15831** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **LCSW** Batch ID: **15831** RunNo: **21817**

Prep Date: **10/9/2014** Analysis Date: **10/10/2014** SeqNo: **641320** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	110	80	120			
Barium	ND	100	0.5000	0	98.3	80	120			
Cadmium	ND	1.0	0.5000	0	103	80	120			
Chromium	ND	5.0	0.5000	0	96.8	80	120			
Lead	ND	5.0	0.5000	0	96.5	80	120			
Selenium	ND	1.0	0.5000	0	103	80	120			
Silver	ND	5.0	0.1000	0	109	80	120			

Qualifiers:

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

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: Western Refining Gallup Work Order Number: 1410350 RcptNo: 1

Received by/date: LM 10/08/14

Logged By: Michelle Garcia 10/8/2014 8:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 10/8/2014 8:30:00 AM Michelle Garcia

Reviewed By: CS 10/08/14

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? Client

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	3.2	Good	Yes			

Chain-of-Custody Record

Client: Western - Refining

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

WWTP Baker Tank Overflow

Project #:

Dirty Sewer Spill

Project Manager:

Beck Larsen

Sampler: A.Dorsey

On Ice: [redacted]

Sample Temperature: [redacted]

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. 1410350	BTEX (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals	Sulfides	Chlorides	Air Bubbles (Y or N)
10/7/2014	10:45	Soil	WWTP Dirty Sewer Spill	9 oz - 6	N/A	-001	X		X	X						X	X	X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
10-07-14	19:00	A.Dorsey	[signature]	10-7-14	1400
10-8-14	8:00	[signature]	[signature]	10/08/14	0800

Remarks: ACT BIN 2051

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.