Chavez, Carl J, EMNRD

From: Johnson, Cheryl A <Cheryl.A.Johnson@andeavor.com>
Sent: Thursday, August 31, 2017 6:42 AM
To: Kieling, John, NMENV; Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Hains, Allen S; Bailey, William M
Subject: C-141 - Naphtha Leak and RRR Gasoline Spill
Attachments: NMED-OCD Resp 083017.pdf; C-141-Naphtha Leak-(Initial-Final) 83017.pdf; C-141-Gasoline Spill Initial 8-30-17.pdf

Good Morning:

Attached are the C-141 Forms for the above referenced spills. A hard copy will also be sent today via US Mail. Should you have any questions, please call or e-mail.

Thank you,

cj

Cheryl Johnson
Environmental Specialist

Andeavor - Gallup Refinery
92 Giant Crossing Road
Gallup, NM 87301
505 722 0231 Direct
505 863-0930 Fax
505 722 3833 Main
Cheryl.A.Johnson@andeavor.com

Western Refining
GALLUP

WNR LISTED NYSE

August 30, 2017

Mr. John Kieling, Chief
New Mexico Environmental Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

RE: SPILL AND RELEASE REPORTING REQUIREMENTS
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211; WRG-17-MISC

Dear Mr. Kieling:

Enclosed are the initial C-141 Reports for releases that occurred on March 26, 2017, (Naphtha Release) and on May 7, 2017 (Gasoline release at the railroad rack). Although both releases were verbally reported to both the NMED-HWB and the NM-OCD, the initial C-141 Form reporting both releases was not completed and forwarded to both agencies as required by Permit Section II.C.3, and subsequent permit modification (Section IV-B.4.a).

Please contact me or Cheryl Johnson, Environmental Specialist (505) 722-0231, should you have any questions.

Sincerely,

William Bailey

William Bailey
Environmental Supervisor
William.M.Bailey@andeavor.com
505-726-9473

Attachments
cc: C Chavez – NM–OCD
K Van Horn – NM-HWB
C Johnson – WNR-GLP
A Haines - WNR-El Paso

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

Form C-141
Revised April 3, 2017

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: Cheryl Johnson
Address: I-40 Exit 39, Jamestown, NM 87347	Telephone No: 505 722 0231
Facility Name: 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	**15N**	**15W**					**McKinley**

Latitude 35°29'20.29"N Longitude 108°25'41.13"W NAD83

NATURE OF RELEASE

Type of Release: Sour Naphtha	Volume of Release: < 5 bbls	Volume Recovered: None
Source of Release: Underground pipe leak	Date and Hour of Occurrence: 03/26/17 @ 10:00 AM	Date and Hour of Discovery: 03/26/17 @ 10:00 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? C Smith/NMED	
By Whom? Bill Bailey	Date and Hour: 03/27/17 @ 10:00 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.* While operator was making his rounds, he smelled naphtha in the air and found a saturated area in the middle of the road where the naphtha was seeping up from the ground (See Figure 1,) and flowed in a westerly direction down the road for approximately 332 feet. Operator notified RSM, Environmental and Kurtz who responded by applying foam to the area to minimize vapors. Operator immediately isolated the line by blocking in valves. Area was isolated and taped off. Maintenance was notified to install earthen berms to control the flow of the spill. No injuries or fires were reported from this release.

Describe Area Affected and Cleanup Action Taken.* Area of the seep was approximately 4 ft x 4 ft section in the middle of the road. Area was excavated to a depth of 4 feet and found an underground 3 inch carbon steel pipe (sour naphtha line to Tank 567) with a 1 inch corroded hole. Maintenance replaced the damaged section of the line. The impacted soil surrounding the area was excavated and placed inside 30 yard bins for disposal. Six locations inside the excavated area were sampled (Figure 2) and sent off for analysis. Based on the analytical (Attachment A), the soil was treated as a hazardous waste (D018), soil with Benzene and sent offsite for disposal. Copies of the manifest are attached (Attachment B). The area was backfilled with clean soil and roadway was re-opened. All impacted soil from the spill was cleaned up from the site and disposed of.

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: Cheryl Johnson	Approved by Environmental Specialist:	
Title: Environmental Specialist	Approval Date:	Expiration Date:
E-mail Address: Cheryl.a.johnson@andeavor.com	Conditions of Approval:	Attached ☐
Date: 08-30-2017 Phone:505-722-0231		

* Attach Additional Sheets If Necessary

FIGURE 1

Flow of sour naphtha leak – downward slope of road in a westerly direction.

FIGURE 2

Sample Locations:

1. **Bottom near break**
2. **Bottom near break**
3. **East wall near break**
4. **West wall near break**
5. **West wall (8 to 10 ft.) from break**
6. **West wall (8 to 10 ft.) from break**

Excavated area: (Estimated at 20 ft. x 4 ft. x 4 ft. deep)

Pipe: 3” carbon steel pipe with a 1 inch diameter corroded hole.

ATTACHMENT A

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

April 21, 2017

William Bailey

Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: Naptha Line Spill OrderNo.: 1704176

Dear William Bailey:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/5/2017 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 13, 2017.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #1
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:30:00 AM
Lab ID: 1704176-001
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**	
Diesel Range Organics (DRO)	25	1.4	8.8		mg/Kg	1	4/10/2017 1:46:18 PM	31151
Motor Oil Range Organics (MRO)	ND	44	44		mg/Kg	1	4/10/2017 1:46:18 PM	31151
Surr: DNOP	112	0	70-130		%Rec	1	4/10/2017 1:46:18 PM	31151
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**	
Gasoline Range Organics (GRO)	4200	110	500		mg/Kg	100	4/6/2017 8:36:44 PM	31106
Surr: BFB	139	0	54-150		%Rec	100	4/6/2017 8:36:44 PM	31106
EPA METHOD 8310: PAHS							Analyst: **SCC**	
Naphthalene	0.13	0.035	0.25	J	mg/Kg	1	4/10/2017 6:52:53 AM	31138
1-Methylnaphthalene	ND	0.025	0.25		mg/Kg	1	4/10/2017 6:52:53 AM	31138
2-Methylnaphthalene	ND	0.025	0.25		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Acenaphthylene	ND	0.021	0.25		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Acenaphthene	ND	0.024	0.25		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Fluorene	ND	0.0022	0.030		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Phenanthrene	0.058	0.0012	0.015		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Anthracene	0.019	0.0011	0.015		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Fluoranthene	0.065	0.0020	0.020		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Pyrene	0.076	0.0024	0.025		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Benz(a)anthracene	0.031	0.00059	0.020		mg/Kg	2	4/10/2017 11:55:16 AM	31138
Chrysene	0.017	0.0014	0.0099		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Benzo(b)fluoranthene	0.017	0.00049	0.0099		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Benzo(k)fluoranthene	0.014	0.00040	0.0099		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Benzo(a)pyrene	0.023	0.00059	0.020		mg/Kg	2	4/10/2017 11:55:16 AM	31138
Dibenz(a,h)anthracene	0.0037	0.00059	0.0099	J	mg/Kg	1	4/10/2017 6:52:53 AM	31138
Benzo(g,h,i)perylene	0.013	0.00040	0.0099		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Indeno(1,2,3-cd)pyrene	0.013	0.0024	0.0099		mg/Kg	1	4/10/2017 6:52:53 AM	31138
Surr: Benzo(e)pyrene	77.0	0	32.4-163		%Rec	1	4/10/2017 6:52:53 AM	31138
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Chloride	270	1.3	30		mg/Kg	20	4/7/2017 3:21:41 PM	31127
Sulfate	30	7.1	30		mg/Kg	20	4/7/2017 3:21:41 PM	31127
MERCURY, TCLP							Analyst: **pmf**	
Mercury	ND	0.00050	0.020		mg/L	1	4/10/2017 2:08:24 PM	31159
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Arsenic	ND	0.024	5.0		mg/L	1	4/10/2017 10:43:30 AM	31140
Barium	3.1	0.0015	100	J	mg/L	1	4/10/2017 10:43:30 AM	31140
Cadmium	ND	0.00080	1.0		mg/L	1	4/10/2017 10:43:30 AM	31140
Chromium	ND	0.0030	5.0		mg/L	1	4/10/2017 10:43:30 AM	31140
Lead	ND	0.0049	5.0		mg/L	1	4/10/2017 10:43:30 AM	31140

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #1
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:30:00 AM
Lab ID: 1704176-001
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Selenium	ND	0.062	1.0		mg/L	1	4/10/2017 10:43:30 AM	31140
Silver	ND	0.0021	5.0		mg/L	1	4/10/2017 10:43:30 AM	31140
VOLATILES BY 8260B/1311							Analyst: **AG**	
Benzene	0.64	0.10	0.50		mg/L	1	4/7/2017 2:56:48 PM	31121
2-Butanone	ND	0.20	200		mg/L	1	4/7/2017 2:56:48 PM	31121
Carbon Tetrachloride	ND	0.10	0.50		mg/L	1	4/7/2017 2:56:48 PM	31121
Chlorobenzene	ND	0.10	100		mg/L	1	4/7/2017 2:56:48 PM	31121
Chloroform	ND	0.10	6.0		mg/L	1	4/7/2017 2:56:48 PM	31121
1,4-Dichlorobenzene	ND	0.10	7.5		mg/L	1	4/7/2017 2:56:48 PM	31121
1,2-Dichloroethane (EDC)	ND	0.10	0.50		mg/L	1	4/7/2017 2:56:48 PM	31121
1,1-Dichloroethene	ND	0.10	0.70		mg/L	1	4/7/2017 2:56:48 PM	31121
Hexachlorobutadiene	ND	0.10	0.50		mg/L	1	4/7/2017 2:56:48 PM	31121
Tetrachloroethene (PCE)	ND	0.10	0.70		mg/L	1	4/7/2017 2:56:48 PM	31121
Trichloroethene (TCE)	ND	0.10	0.50		mg/L	1	4/7/2017 2:56:48 PM	31121
Vinyl chloride	ND	0.10	0.20		mg/L	1	4/7/2017 2:56:48 PM	31121
Surr: 1,2-Dichloroethane-d4	89.8	0	70-130		%Rec	1	4/7/2017 2:56:48 PM	31121
Surr: 4-Bromofluorobenzene	107	0	70-130		%Rec	1	4/7/2017 2:56:48 PM	31121
Surr: Dibromofluoromethane	100	0	70-130		%Rec	1	4/7/2017 2:56:48 PM	31121
Surr: Toluene-d8	95.6	0	70-130		%Rec	1	4/7/2017 2:56:48 PM	31121

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #2
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:35:00 AM
Lab ID: 1704176-002
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**	
Diesel Range Organics (DRO)	320	1.5	9.5		mg/Kg	1	4/10/2017 3:02:46 PM	31128
Motor Oil Range Organics (MRO)	100	47	47		mg/Kg	1	4/10/2017 3:02:46 PM	31128
Surr: DNOP	102	0	70-130		%Rec	1	4/10/2017 3:02:46 PM	31128
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**	
Gasoline Range Organics (GRO)	5900	110	500		mg/Kg	100	4/6/2017 9:00:10 PM	31106
Surr: BFB	208	0	54-150	S	%Rec	100	4/6/2017 9:00:10 PM	31106
EPA METHOD 8310: PAHS							Analyst: **SCC**	
Naphthalene	0.92	0.34	2.4	J	mg/Kg	1	4/10/2017 8:07:17 AM	31138
1-Methylnaphthalene	1.3	0.24	2.4	J	mg/Kg	1	4/10/2017 8:07:17 AM	31138
2-Methylnaphthalene	0.53	0.24	2.4	J	mg/Kg	1	4/10/2017 8:07:17 AM	31138
Acenaphthylene	ND	0.20	2.4		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Acenaphthene	0.70	0.23	2.4	J	mg/Kg	1	4/10/2017 8:07:17 AM	31138
Fluorene	ND	0.021	0.29		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Phenanthrene	1.5	0.023	0.29		mg/Kg	2	4/10/2017 12:26:30 PM	31138
Anthracene	0.16	0.011	0.14		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Fluoranthene	1.4	0.019	0.19		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Pyrene	1.4	0.023	0.24		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Benz(a)anthracene	0.31	0.0057	0.19		mg/Kg	2	4/10/2017 12:26:30 PM	31138
Chrysene	0.16	0.013	0.096		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Benzo(b)fluoranthene	0.16	0.0048	0.096		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Benzo(k)fluoranthene	0.098	0.0038	0.096		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Benzo(a)pyrene	0.20	0.0057	0.19		mg/Kg	2	4/10/2017 12:26:30 PM	31138
Dibenz(a,h)anthracene	0.026	0.0057	0.096	J	mg/Kg	1	4/10/2017 8:07:17 AM	31138
Benzo(g,h,i)perylene	0.12	0.0038	0.096		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Indeno(1,2,3-cd)pyrene	0.10	0.023	0.096		mg/Kg	1	4/10/2017 8:07:17 AM	31138
Surr: Benzo(e)pyrene	89.5	0	32.4-163		%Rec	1	4/10/2017 8:07:17 AM	31138
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Chloride	560	1.3	30		mg/Kg	20	4/7/2017 3:34:05 PM	31127
Sulfate	19	7.1	30	J	mg/Kg	20	4/7/2017 3:34:05 PM	31127
MERCURY, TCLP							Analyst: **pmf**	
Mercury	ND	0.00050	0.020		mg/L	1	4/10/2017 2:10:11 PM	31159
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Arsenic	ND	0.024	5.0		mg/L	1	4/10/2017 10:48:04 AM	31140
Barium	3.2	0.0015	100	J	mg/L	1	4/10/2017 10:48:04 AM	31140
Cadmium	ND	0.00080	1.0		mg/L	1	4/10/2017 10:48:04 AM	31140
Chromium	ND	0.0030	5.0		mg/L	1	4/10/2017 10:48:04 AM	31140
Lead	ND	0.0049	5.0		mg/L	1	4/10/2017 10:48:04 AM	31140

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #2
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:35:00 AM
Lab ID: 1704176-002
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Selenium	ND	0.062	1.0		mg/L	1	4/10/2017 10:48:04 AM	31140
Silver	ND	0.0021	5.0		mg/L	1	4/10/2017 10:48:04 AM	31140
VOLATILES BY 8260B/1311							Analyst: **AG**	
Benzene	0.62	0.10	0.50		mg/L	1	4/7/2017 4:23:32 PM	31121
2-Butanone	ND	0.20	200		mg/L	1	4/7/2017 4:23:32 PM	31121
Carbon Tetrachloride	ND	0.10	0.50		mg/L	1	4/7/2017 4:23:32 PM	31121
Chlorobenzene	ND	0.10	100		mg/L	1	4/7/2017 4:23:32 PM	31121
Chloroform	ND	0.10	6.0		mg/L	1	4/7/2017 4:23:32 PM	31121
1,4-Dichlorobenzene	ND	0.10	7.5		mg/L	1	4/7/2017 4:23:32 PM	31121
1,2-Dichloroethane (EDC)	ND	0.10	0.50		mg/L	1	4/7/2017 4:23:32 PM	31121
1,1-Dichloroethene	ND	0.10	0.70		mg/L	1	4/7/2017 4:23:32 PM	31121
Hexachlorobutadiene	ND	0.10	0.50		mg/L	1	4/7/2017 4:23:32 PM	31121
Tetrachloroethene (PCE)	ND	0.10	0.70		mg/L	1	4/7/2017 4:23:32 PM	31121
Trichloroethene (TCE)	ND	0.10	0.50		mg/L	1	4/7/2017 4:23:32 PM	31121
Vinyl chloride	ND	0.10	0.20		mg/L	1	4/7/2017 4:23:32 PM	31121
Surr: 1,2-Dichloroethane-d4	94.1	0	70-130		%Rec	1	4/7/2017 4:23:32 PM	31121
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	1	4/7/2017 4:23:32 PM	31121
Surr: Dibromofluoromethane	98.2	0	70-130		%Rec	1	4/7/2017 4:23:32 PM	31121
Surr: Toluene-d8	96.4	0	70-130		%Rec	1	4/7/2017 4:23:32 PM	31121

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #3
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:40:00 AM
Lab ID: 1704176-003
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**	
Diesel Range Organics (DRO)	360	16	100		mg/Kg	10	4/10/2017 12:17:24 PM	31128
Motor Oil Range Organics (MRO)	ND	500	500		mg/Kg	10	4/10/2017 12:17:24 PM	31128
Surr: DNOP	0	0	70-130	S	%Rec	10	4/10/2017 12:17:24 PM	31128
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**	
Gasoline Range Organics (GRO)	9800	110	500		mg/Kg	100	4/6/2017 9:23:28 PM	31106
Surr: BFB	260	0	54-150	S	%Rec	100	4/6/2017 9:23:28 PM	31106
EPA METHOD 8310: PAHS							Analyst: **SCC**	
Naphthalene	1.3	0.34	2.4	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
1-Methylnaphthalene	1.1	0.24	2.4	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
2-Methylnaphthalene	ND	0.24	2.4		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Acenaphthylene	ND	0.20	2.4		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Acenaphthene	ND	0.23	2.4		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Fluorene	ND	0.021	0.29		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Phenanthrene	0.062	0.012	0.14	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Anthracene	ND	0.011	0.14		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Fluoranthene	0.27	0.019	0.19		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Pyrene	0.30	0.023	0.24		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Benz(a)anthracene	0.096	0.0029	0.096		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Chrysene	0.062	0.013	0.096	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Benzo(b)fluoranthene	0.041	0.0048	0.096	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Benzo(k)fluoranthene	0.031	0.0038	0.096	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Benzo(a)pyrene	0.060	0.0029	0.096	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Dibenz(a,h)anthracene	0.017	0.0058	0.096	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Benzo(g,h,i)perylene	0.043	0.0038	0.096	J	mg/Kg	1	4/10/2017 8:44:40 AM	31138
Indeno(1,2,3-cd)pyrene	ND	0.023	0.096		mg/Kg	1	4/10/2017 8:44:40 AM	31138
Surr: Benzo(e)pyrene	82.5	0	32.4-163		%Rec	1	4/10/2017 8:44:40 AM	31138
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Chloride	54	1.3	30		mg/Kg	20	4/7/2017 3:46:29 PM	31127
Sulfate	15	7.1	30	J	mg/Kg	20	4/7/2017 3:46:29 PM	31127
MERCURY, TCLP							Analyst: **pmf**	
Mercury	ND	0.00050	0.020		mg/L	1	4/10/2017 2:11:59 PM	31159
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Arsenic	ND	0.024	5.0		mg/L	1	4/10/2017 10:49:35 AM	31140
Barium	3.3	0.0015	100	J	mg/L	1	4/10/2017 10:49:35 AM	31140
Cadmium	ND	0.00080	1.0		mg/L	1	4/10/2017 10:49:35 AM	31140
Chromium	ND	0.0030	5.0		mg/L	1	4/10/2017 10:49:35 AM	31140
Lead	ND	0.0049	5.0		mg/L	1	4/10/2017 10:49:35 AM	31140

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #3
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:40:00 AM
Lab ID: 1704176-003
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Selenium	ND	0.062	1.0		mg/L	1	4/10/2017 10:49:35 AM	31140
Silver	ND	0.0021	5.0		mg/L	1	4/10/2017 10:49:35 AM	31140
VOLATILES BY 8260B/1311							Analyst: **AG**	
Benzene	0.72	0.10	0.50		mg/L	1	4/7/2017 4:52:25 PM	31121
2-Butanone	ND	0.20	200		mg/L	1	4/7/2017 4:52:25 PM	31121
Carbon Tetrachloride	ND	0.10	0.50		mg/L	1	4/7/2017 4:52:25 PM	31121
Chlorobenzene	ND	0.10	100		mg/L	1	4/7/2017 4:52:25 PM	31121
Chloroform	ND	0.10	6.0		mg/L	1	4/7/2017 4:52:25 PM	31121
1,4-Dichlorobenzene	ND	0.10	7.5		mg/L	1	4/7/2017 4:52:25 PM	31121
1,2-Dichloroethane (EDC)	ND	0.10	0.50		mg/L	1	4/7/2017 4:52:25 PM	31121
1,1-Dichloroethene	ND	0.10	0.70		mg/L	1	4/7/2017 4:52:25 PM	31121
Hexachlorobutadiene	ND	0.10	0.50		mg/L	1	4/7/2017 4:52:25 PM	31121
Tetrachloroethene (PCE)	ND	0.10	0.70		mg/L	1	4/7/2017 4:52:25 PM	31121
Trichloroethene (TCE)	ND	0.10	0.50		mg/L	1	4/7/2017 4:52:25 PM	31121
Vinyl chloride	ND	0.10	0.20		mg/L	1	4/7/2017 4:52:25 PM	31121
Surr: 1,2-Dichloroethane-d4	97.5	0	70-130		%Rec	1	4/7/2017 4:52:25 PM	31121
Surr: 4-Bromofluorobenzene	109	0	70-130		%Rec	1	4/7/2017 4:52:25 PM	31121
Surr: Dibromofluoromethane	102	0	70-130		%Rec	1	4/7/2017 4:52:25 PM	31121
Surr: Toluene-d8	93.7	0	70-130		%Rec	1	4/7/2017 4:52:25 PM	31121

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #4
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:45:00 AM
Lab ID: 1704176-004
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**	
Diesel Range Organics (DRO)	250	15	94		mg/Kg	10	4/10/2017 12:39:33 PM	31128
Motor Oil Range Organics (MRO)	ND	470	470		mg/Kg	10	4/10/2017 12:39:33 PM	31128
Surr: DNOP	0	0	70-130	S	%Rec	10	4/10/2017 12:39:33 PM	31128
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**	
Gasoline Range Organics (GRO)	7300	110	500		mg/Kg	100	4/6/2017 9:46:51 PM	31106
Surr: BFB	215	0	54-150	S	%Rec	100	4/6/2017 9:46:51 PM	31106
EPA METHOD 8310: PAHS							Analyst: **SCC**	
Naphthalene	0.95	0.35	2.4	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
1-Methylnaphthalene	0.90	0.24	2.4	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
2-Methylnaphthalene	ND	0.25	2.4		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Acenaphthylene	ND	0.21	2.4		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Acenaphthene	ND	0.24	2.4		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Fluorene	ND	0.022	0.29		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Phenanthrene	ND	0.012	0.15		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Anthracene	ND	0.011	0.15		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Fluoranthene	0.024	0.020	0.20	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
Pyrene	0.039	0.023	0.24	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
Benz(a)anthracene	0.0073	0.0029	0.098	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
Chrysene	ND	0.014	0.098		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Benzo(b)fluoranthene	0.0049	0.0049	0.098	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
Benzo(k)fluoranthene	ND	0.0039	0.098		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Benzo(a)pyrene	0.0073	0.0029	0.098	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
Dibenz(a,h)anthracene	ND	0.0059	0.098		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Benzo(g,h,i)perylene	0.012	0.0039	0.098	J	mg/Kg	1	4/10/2017 9:15:55 AM	31138
Indeno(1,2,3-cd)pyrene	ND	0.023	0.098		mg/Kg	1	4/10/2017 9:15:55 AM	31138
Surr: Benzo(e)pyrene	95.5	0	32.4-163		%Rec	1	4/10/2017 9:15:55 AM	31138
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Chloride	750	1.3	30		mg/Kg	20	4/7/2017 3:58:53 PM	31127
Sulfate	34	7.1	30		mg/Kg	20	4/7/2017 3:58:53 PM	31127
MERCURY, TCLP							Analyst: **pmf**	
Mercury	ND	0.00050	0.020		mg/L	1	4/10/2017 2:13:47 PM	31159
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Arsenic	ND	0.024	5.0		mg/L	1	4/10/2017 10:51:05 AM	31140
Barium	3.5	0.0015	100	J	mg/L	1	4/10/2017 10:51:05 AM	31140
Cadmium	ND	0.00080	1.0		mg/L	1	4/10/2017 10:51:05 AM	31140
Chromium	ND	0.0030	5.0		mg/L	1	4/10/2017 10:51:05 AM	31140
Lead	ND	0.0049	5.0		mg/L	1	4/10/2017 10:51:05 AM	31140

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #4
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:45:00 AM
Lab ID: 1704176-004
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Selenium	ND	0.062	1.0		mg/L	1	4/10/2017 10:51:05 AM	31140
Silver	ND	0.0021	5.0		mg/L	1	4/10/2017 10:51:05 AM	31140
EPA METHOD 8260B: VOLATILES							Analyst: **DJF**	
Benzene	25	0.098	0.50	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Toluene	220	0.40	5.0	H	mg/Kg	100	4/20/2017 3:29:40 PM	31106
Ethylbenzene	120	0.35	5.0	H	mg/Kg	100	4/20/2017 3:29:40 PM	31106
Methyl tert-butyl ether (MTBE)	ND	0.15	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2,4-Trimethylbenzene	67	0.087	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,3,5-Trimethylbenzene	28	0.063	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2-Dichloroethane (EDC)	ND	0.10	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2-Dibromoethane (EDB)	ND	0.13	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Naphthalene	0.83	0.10	2.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1-Methylnaphthalene	0.45	0.071	4.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
2-Methylnaphthalene	0.44	0.081	4.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Acetone	ND	1.1	15	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Bromobenzene	ND	0.073	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Bromodichloromethane	ND	0.13	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Bromoform	ND	0.24	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Bromomethane	ND	0.17	3.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
2-Butanone	ND	0.59	10	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Carbon disulfide	ND	0.12	10	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Carbon tetrachloride	ND	0.098	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Chlorobenzene	ND	0.059	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Chloroethane	ND	0.33	2.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Chloroform	ND	0.060	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Chloromethane	ND	0.21	3.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
2-Chlorotoluene	ND	0.077	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
4-Chlorotoluene	ND	0.090	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
cis-1,2-DCE	ND	0.13	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
cis-1,3-Dichloropropene	ND	0.076	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2-Dibromo-3-chloropropane	0.16	0.14	2.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Dibromochloromethane	ND	0.084	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Dibromomethane	ND	0.049	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2-Dichlorobenzene	ND	0.050	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,3-Dichlorobenzene	ND	0.088	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,4-Dichlorobenzene	ND	0.11	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Dichlorodifluoromethane	ND	0.41	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1-Dichloroethane	ND	0.40	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1-Dichloroethene	ND	0.40	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #4
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:45:00 AM
Lab ID: 1704176-004
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: **DJF**	
1,2-Dichloropropane	ND	0.062	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,3-Dichloropropane	ND	0.25	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
2,2-Dichloropropane	ND	0.11	2.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1-Dichloropropene	ND	0.11	2.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Hexachlorobutadiene	ND	0.25	2.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
2-Hexanone	ND	0.19	10	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Isopropylbenzene	19	0.067	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
4-Isopropyltoluene	3.4	0.076	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
4-Methyl-2-pentanone	ND	0.21	10	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Methylene chloride	ND	0.40	3.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
n-Butylbenzene	4.0	0.089	3.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
n-Propylbenzene	27	0.062	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
sec-Butylbenzene	4.9	0.10	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Styrene	ND	0.17	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
tert-Butylbenzene	0.19	0.081	1.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1,1,2-Tetrachloroethane	ND	0.11	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1,2,2-Tetrachloroethane	ND	0.29	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Tetrachloroethene (PCE)	ND	0.080	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
trans-1,2-DCE	ND	0.40	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
trans-1,3-Dichloropropene	ND	0.12	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2,3-Trichlorobenzene	0.14	0.091	2.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2,4-Trichlorobenzene	0.14	0.10	1.0	JH	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1,1-Trichloroethane	ND	0.13	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,1,2-Trichloroethane	ND	0.11	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Trichloroethene (TCE)	ND	0.12	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Trichlorofluoromethane	ND	0.15	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
1,2,3-Trichloropropane	ND	0.50	2.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Vinyl chloride	ND	0.083	1.0	H	mg/Kg	20	4/20/2017 3:58:36 PM	31106
Xylenes, Total	330	1.6	10	H	mg/Kg	100	4/20/2017 3:29:40 PM	31106
Surr: Dibromofluoromethane	70.6		70-130	H	%Rec	20	4/20/2017 3:58:36 PM	31106
Surr: 1,2-Dichloroethane-d4	88.4		70-130	H	%Rec	20	4/20/2017 3:58:36 PM	31106
Surr: Toluene-d8	105		70-130	H	%Rec	20	4/20/2017 3:58:36 PM	31106
Surr: 4-Bromofluorobenzene	101		70-130	H	%Rec	20	4/20/2017 3:58:36 PM	31106
VOLATILES BY 8260B/1311							Analyst: **rde**	
Benzene	0.88	0.10	0.50		mg/L	1	4/10/2017 1:42:00 PM	31139
2-Butanone	ND	0.20	200		mg/L	1	4/10/2017 1:42:00 PM	31139
Carbon Tetrachloride	ND	0.10	0.50		mg/L	1	4/10/2017 1:42:00 PM	31139
Chlorobenzene	ND	0.10	100		mg/L	1	4/10/2017 1:42:00 PM	31139
Chloroform	ND	0.10	6.0		mg/L	1	4/10/2017 1:42:00 PM	31139

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #4
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:45:00 AM
Lab ID: 1704176-004
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
VOLATILES BY 8260B/1311							Analyst: **rde**	
1,4-Dichlorobenzene	ND	0.10	7.5		mg/L	1	4/10/2017 1:42:00 PM	31139
1,2-Dichloroethane (EDC)	ND	0.10	0.50		mg/L	1	4/10/2017 1:42:00 PM	31139
1,1-Dichloroethene	ND	0.10	0.70		mg/L	1	4/10/2017 1:42:00 PM	31139
Hexachlorobutadiene	ND	0.10	0.50		mg/L	1	4/10/2017 1:42:00 PM	31139
Tetrachloroethene (PCE)	ND	0.10	0.70		mg/L	1	4/10/2017 1:42:00 PM	31139
Trichloroethene (TCE)	ND	0.10	0.50		mg/L	1	4/10/2017 1:42:00 PM	31139
Vinyl chloride	ND	0.10	0.20		mg/L	1	4/10/2017 1:42:00 PM	31139
Surr: 1,2-Dichloroethane-d4	83.0	0	70-130		%Rec	1	4/10/2017 1:42:00 PM	31139
Surr: 4-Bromofluorobenzene	101	0	70-130		%Rec	1	4/10/2017 1:42:00 PM	31139
Surr: Dibromofluoromethane	100	0	70-130		%Rec	1	4/10/2017 1:42:00 PM	31139
Surr: Toluene-d8	94.3	0	70-130		%Rec	1	4/10/2017 1:42:00 PM	31139

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #5
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:50:00 AM
Lab ID: 1704176-005
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**	
Diesel Range Organics (DRO)	70	1.6	10		mg/Kg	1	4/10/2017 2:34:32 PM	31128
Motor Oil Range Organics (MRO)	ND	52	52		mg/Kg	1	4/10/2017 2:34:32 PM	31128
Surr: DNOP	93.8	0	70-130		%Rec	1	4/10/2017 2:34:32 PM	31128
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**	
Gasoline Range Organics (GRO)	3000	110	500		mg/Kg	100	4/6/2017 10:10:07 PM	31106
Surr: BFB	121	0	54-150		%Rec	100	4/6/2017 10:10:07 PM	31106
EPA METHOD 8310: PAHS							Analyst: **SCC**	
Naphthalene	0.36	0.34	2.4	J	mg/Kg	1	4/10/2017 9:47:11 AM	31138
1-Methylnaphthalene	0.49	0.24	2.4	J	mg/Kg	1	4/10/2017 9:47:11 AM	31138
2-Methylnaphthalene	ND	0.24	2.4		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Acenaphthylene	ND	0.20	2.4		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Acenaphthene	ND	0.23	2.4		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Fluorene	ND	0.021	0.29		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Phenanthrene	ND	0.011	0.14		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Anthracene	ND	0.010	0.14		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Fluoranthene	0.041	0.019	0.19	J	mg/Kg	1	4/10/2017 9:47:11 AM	31138
Pyrene	0.038	0.023	0.24	J	mg/Kg	1	4/10/2017 9:47:11 AM	31138
Benz(a)anthracene	0.0072	0.0029	0.095	J	mg/Kg	1	4/10/2017 9:47:11 AM	31138
Chrysene	ND	0.013	0.095		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Benzo(b)fluoranthene	ND	0.0048	0.095		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Benzo(k)fluoranthene	ND	0.0038	0.095		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Benzo(a)pyrene	ND	0.0029	0.095		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Dibenz(a,h)anthracene	ND	0.0057	0.095		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Benzo(g,h,i)perylene	0.0072	0.0038	0.095	J	mg/Kg	1	4/10/2017 9:47:11 AM	31138
Indeno(1,2,3-cd)pyrene	ND	0.023	0.095		mg/Kg	1	4/10/2017 9:47:11 AM	31138
Surr: Benzo(e)pyrene	94.0	0	32.4-163		%Rec	1	4/10/2017 9:47:11 AM	31138
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Chloride	70	1.3	30		mg/Kg	20	4/7/2017 4:11:18 PM	31127
Sulfate	96	7.1	30		mg/Kg	20	4/7/2017 4:11:18 PM	31127
MERCURY, TCLP							Analyst: **pmf**	
Mercury	ND	0.00050	0.020		mg/L	1	4/10/2017 2:15:36 PM	31159
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Arsenic	ND	0.024	5.0		mg/L	1	4/10/2017 10:52:36 AM	31140
Barium	1.3	0.0015	100	J	mg/L	1	4/10/2017 10:52:36 AM	31140
Cadmium	ND	0.00080	1.0		mg/L	1	4/10/2017 10:52:36 AM	31140
Chromium	ND	0.0030	5.0		mg/L	1	4/10/2017 10:52:36 AM	31140
Lead	ND	0.0049	5.0		mg/L	1	4/10/2017 10:52:36 AM	31140

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #5
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:50:00 AM
Lab ID: 1704176-005
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Selenium	ND	0.062	1.0		mg/L	1	4/10/2017 10:52:36 AM	31140
Silver	ND	0.0021	5.0		mg/L	1	4/10/2017 10:52:36 AM	31140
VOLATILES BY 8260B/1311							Analyst: **rde**	
Benzene	0.63	0.10	0.50		mg/L	1	4/10/2017 2:54:00 PM	31139
2-Butanone	ND	0.20	200		mg/L	1	4/10/2017 2:54:00 PM	31139
Carbon Tetrachloride	ND	0.10	0.50		mg/L	1	4/10/2017 2:54:00 PM	31139
Chlorobenzene	ND	0.10	100		mg/L	1	4/10/2017 2:54:00 PM	31139
Chloroform	ND	0.10	6.0		mg/L	1	4/10/2017 2:54:00 PM	31139
1,4-Dichlorobenzene	ND	0.10	7.5		mg/L	1	4/10/2017 2:54:00 PM	31139
1,2-Dichloroethane (EDC)	ND	0.10	0.50		mg/L	1	4/10/2017 2:54:00 PM	31139
1,1-Dichloroethene	ND	0.10	0.70		mg/L	1	4/10/2017 2:54:00 PM	31139
Hexachlorobutadiene	ND	0.10	0.50		mg/L	1	4/10/2017 2:54:00 PM	31139
Tetrachloroethene (PCE)	ND	0.10	0.70		mg/L	1	4/10/2017 2:54:00 PM	31139
Trichloroethene (TCE)	ND	0.10	0.50		mg/L	1	4/10/2017 2:54:00 PM	31139
Vinyl chloride	ND	0.10	0.20		mg/L	1	4/10/2017 2:54:00 PM	31139
Surr: 1,2-Dichloroethane-d4	81.6	0	70-130		%Rec	1	4/10/2017 2:54:00 PM	31139
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	4/10/2017 2:54:00 PM	31139
Surr: Dibromofluoromethane	101	0	70-130		%Rec	1	4/10/2017 2:54:00 PM	31139
Surr: Toluene-d8	95.8	0	70-130		%Rec	1	4/10/2017 2:54:00 PM	31139

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #6
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:55:00 AM
Lab ID: 1704176-006
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**	
Diesel Range Organics (DRO)	1.7	1.6	10	J	mg/Kg	1	4/10/2017 1:23:57 PM	31128
Motor Oil Range Organics (MRO)	ND	51	51		mg/Kg	1	4/10/2017 1:23:57 PM	31128
Surr: DNOP	106	0	70-130		%Rec	1	4/10/2017 1:23:57 PM	31128
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	1.1	5.0		mg/Kg	1	4/7/2017 12:07:09 AM	31106
Surr: BFB	89.3	0	54-150		%Rec	1	4/7/2017 12:07:09 AM	31106
EPA METHOD 8310: PAHS							Analyst: **SCC**	
Naphthalene	ND	0.036	0.25		mg/Kg	1	4/10/2017 10:19:59 AM	31138
1-Methylnaphthalene	ND	0.025	0.25		mg/Kg	1	4/10/2017 10:19:59 AM	31138
2-Methylnaphthalene	ND	0.025	0.25		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Acenaphthylene	ND	0.021	0.25		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Acenaphthene	ND	0.024	0.25		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Fluorene	ND	0.0022	0.030		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Phenanthrene	ND	0.0012	0.015		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Anthracene	ND	0.0011	0.015		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Fluoranthene	ND	0.0020	0.020		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Pyrene	0.0040	0.0024	0.025	J	mg/Kg	1	4/10/2017 10:19:59 AM	31138
Benz(a)anthracene	0.00075	0.00030	0.010	J	mg/Kg	1	4/10/2017 10:19:59 AM	31138
Chrysene	ND	0.0014	0.010		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Benzo(b)fluoranthene	0.00050	0.00050	0.010	J	mg/Kg	1	4/10/2017 10:19:59 AM	31138
Benzo(k)fluoranthene	ND	0.00040	0.010		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Benzo(a)pyrene	0.00050	0.00030	0.010	J	mg/Kg	1	4/10/2017 10:19:59 AM	31138
Dibenz(a,h)anthracene	ND	0.00060	0.010		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Benzo(g,h,i)perylene	0.00050	0.00040	0.010	J	mg/Kg	1	4/10/2017 10:19:59 AM	31138
Indeno(1,2,3-cd)pyrene	ND	0.0024	0.010		mg/Kg	1	4/10/2017 10:19:59 AM	31138
Surr: Benzo(e)pyrene	44.1	0	32.4-163		%Rec	1	4/10/2017 10:19:59 AM	31138
EPA METHOD 300.0: ANIONS							Analyst: **MRA**	
Chloride	120	1.3	30		mg/Kg	20	4/7/2017 4:48:32 PM	31127
Sulfate	95	7.1	30		mg/Kg	20	4/7/2017 4:48:32 PM	31127
MERCURY, TCLP							Analyst: **pmf**	
Mercury	ND	0.00050	0.020		mg/L	1	4/10/2017 2:21:06 PM	31159
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Arsenic	ND	0.024	5.0		mg/L	1	4/10/2017 11:17:23 AM	31140
Barium	2.5	0.0015	100	J	mg/L	1	4/10/2017 11:17:23 AM	31140
Cadmium	ND	0.00080	1.0		mg/L	1	4/10/2017 11:17:23 AM	31140
Chromium	ND	0.0030	5.0		mg/L	1	4/10/2017 11:17:23 AM	31140
Lead	ND	0.0049	5.0		mg/L	1	4/10/2017 11:17:23 AM	31140

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Sample Location #6
Project: Naptha Line Spill
Collection Date: 3/30/2017 11:55:00 AM
Lab ID: 1704176-006
Matrix: SLUDGE
Received Date: 4/5/2017 2:18:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: **MED**	
Selenium	ND	0.062	1.0		mg/L	1	4/10/2017 11:17:23 AM	31140
Silver	ND	0.0021	5.0		mg/L	1	4/10/2017 11:17:23 AM	31140
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: **DJF**	
Benzene	ND	0.049	0.50		ppm	10	4/6/2017 2:15:16 PM	31106
1,2-Dichloroethane (EDC)	ND	0.052	0.50		ppm	10	4/6/2017 2:15:16 PM	31106
2-Butanone	ND	0.30	200		ppm	10	4/6/2017 2:15:16 PM	31106
Carbon tetrachloride	ND	0.049	0.50		ppm	10	4/6/2017 2:15:16 PM	31106
Chlorobenzene	ND	0.030	100		ppm	10	4/6/2017 2:15:16 PM	31106
Chloroform	ND	0.030	6.0		ppm	10	4/6/2017 2:15:16 PM	31106
1,4-Dichlorobenzene	ND	0.055	7.5		ppm	10	4/6/2017 2:15:16 PM	31106
1,1-Dichloroethene	ND	0.20	0.70		ppm	10	4/6/2017 2:15:16 PM	31106
Tetrachloroethene (PCE)	ND	0.040	0.70		ppm	10	4/6/2017 2:15:16 PM	31106
Trichloroethene (TCE)	ND	0.060	0.50		ppm	10	4/6/2017 2:15:16 PM	31106
Vinyl chloride	ND	0.042	0.20		ppm	10	4/6/2017 2:15:16 PM	31106
Surr: 1,2-Dichloroethane-d4	109		70-130		%Rec	10	4/6/2017 2:15:16 PM	31106
Surr: 4-Bromofluorobenzene	89.7		70-130		%Rec	10	4/6/2017 2:15:16 PM	31106
Surr: Dibromofluoromethane	106		70-130		%Rec	10	4/6/2017 2:15:16 PM	31106
Surr: Toluene-d8	98.4		70-130		%Rec	10	4/6/2017 2:15:16 PM	31106

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	04/10/2017 09:14	WG968433

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	04/07/2017 19:15	WG968481

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	9.68	T8	1	04/08/2017 11:27	WG968631

Sample Narrative:
9045D L901160-01 WG968631: 9.68 at 20.0c

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	128		1	04/07/2017 19:00	WG968557

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Reactive Cyanide	ND		0.250	1	04/10/2017 09:15	WG968433

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Reactive Sulfide	42.7		25.0	1	04/07/2017 19:15	WG968481

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
Corrosivity by pH	8.86	T8	1	04/08/2017 11:27	WG968631

Sample Narrative:

9045D L901160-02 WG968631: 8.86 at 19.8c

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	Deg. F			date / time	
Ignitability	77.7		1	04/07/2017 19:00	WG968557

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	04/10/2017 09:17	WG968433

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	04/07/2017 19:15	WG968481

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	9.19	T6	1	04/08/2017 11:27	WG968631

Sample Narrative:

9045D L901160-03 WG968631: 9.19 at 20.0c

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	69.7		1	04/07/2017 19:00	WG968557

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	04/10/2017 09:18	WG968433

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	36.6		25.0	1	04/07/2017 19:15	WG968481

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	9.40	T8	1	04/08/2017 11:27	WG968631

Sample Narrative:

9045D L901160-04 WG968631: 9.40 at 20.0c

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	76.5		1	04/07/2017 19:00	WG968557

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	04/10/2017 09:19	WG968433

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	04/07/2017 19:15	WG968481

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	8.40	T6	1	04/08/2017 11:27	WG968631

Sample Narrative:

9045D L901160-05 WG968631: 8.40 at 20.2c

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	123		1	04/07/2017 19:00	WG968557

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	04/10/2017 09:21	WG968433

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	04/07/2017 19:15	WG968481

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	8.67	T8	1	04/08/2017 11:27	WG968631

Sample Narrative:

9045D L901160-06 WG968631: 8.67 at 20.4c

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170		1	04/07/2017 19:00	WG968557

Method Blank (MB)

(MB) R3209490-1 04/10/17 08:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Reactive Cyanide	U		0.039	0.250

L901165-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901165-01 04/10/17 09:25 • (DUP) R3209490-7 04/10/17 09:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Reactive Cyanide	ND	0.000	1	200	P1	20

L901035-08 Original Sample (OS) • Duplicate (DUP)

(OS) L901035-08 04/10/17 09:01 • (DUP) R3209490-10 04/10/17 09:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Reactive Cyanide	ND	0.000	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3209490-2 04/10/17 08:53 • (LCSD) R3209490-3 04/10/17 08:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Reactive Cyanide	2.50	2.48	2.45	99	98	50-150			1	20

L901035-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L901035-16 04/10/17 09:10 • (MS) R3209490-9 04/10/17 09:11 • (MSD) R3209490-8 04/10/17 09:03

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Reactive Cyanide	1.67	ND	1.52	1.57	87	90	1	75-125			3	20

Method Blank (MB)

(MB) WG968481-1 04/07/17 19:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Reactive Sulfide	U		7.63	25.0

L901160-06 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-06 04/07/17 19:15 • (DUP) WG968481-4 04/07/17 19:15

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Sulfide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG968481-2 04/07/17 19:15 • (LCSD) WG968481-3 04/07/17 19:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Reactive Sulfide	100	73.3	79.4	73.3	79.4	70.0-130			7.99	20

L900577-01 Original Sample (OS) • Duplicate (DUP)

(OS) L900577-01 04/08/17 11:27 • (DUP) WG968631-3 04/08/17 11:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
Corrosivity by pH	6.74	6.72	1	0.297	T8	1

L901160-06 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-06 04/08/17 11:27 • (DUP) WG968631-4 04/08/17 11:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
Corrosivity by pH	8.67	8.68	1	0.115	T8	1

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG968631-1 04/08/17 11:27 • (LCSD) WG968631-2 04/08/17 11:27

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	su	su	su	%	%	%			%	%
Corrosivity by pH	7.50	7.54	7.56	101	101	98.4-102			0.265	1

L899835-08 Original Sample (OS) • Duplicate (DUP)

(OS) L899835-08 04/07/17 19:00 • (DUP) R3209250-3 04/07/17 19:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	DNI at 170	DNI at 170	1	0.000		10

L901160-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-01 04/07/17 19:00 • (DUP) R3209250-4 04/07/17 19:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	128	126	1	1.00		10

L901160-02 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-02 04/07/17 19:00 • (DUP) R3209250-5 04/07/17 19:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	77.7	80.0	1	3.00		10

L901160-03 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-03 04/07/17 19:00 • (DUP) R3209250-6 04/07/17 19:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	69.7	70.0	1	0.000		10

L901160-04 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-04 04/07/17 19:00 • (DUP) R3209250-7 04/07/17 19:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	76.5	75.6	1	1.00		10

L901160-05 Original Sample (OS) • Duplicate (DUP)

(OS) L901160-05 04/07/17 19:00 • (DUP) R3209250-8 04/07/17 19:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Deg. F	Deg. F		%		%
Ignitability	123	126	1	2.00		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3209250-1 04/07/17 19:00 • (LCSD) R3209250-2 04/07/17 19:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Deg. F	Deg. F	Deg. F	%	%	%			%	%
Ignitability	82.0	80.4	80.7	98.0	98.0	96.0-104			0.000	10

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Rec.	Recovery.

Qualifier	Description
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID	**MB-31127**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**31127**	RunNo:	**41969**					
Prep Date:	**4/7/2017**	Analysis Date:	**4/7/2017**	SeqNo:	**1318741**	Units:	**mg/Kg**			

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

Sample ID	**LCS-31127**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**31127**	RunNo:	**41969**					
Prep Date:	**4/7/2017**	Analysis Date:	**4/7/2017**	SeqNo:	**1318742**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			
Sulfate	29	1.5	30.00	0	97.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **MB-31128**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **31128**	RunNo: **41990**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318833** 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	11		10.00		110	70	130			

Sample ID **MB-31151**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **31151**	RunNo: **41990**
Prep Date: **4/10/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318834** 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	10		10.00		102	70	130			

Sample ID **LCS-31128**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **31128**	RunNo: **41990**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318835** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	63.8	116			
Surr: DNOP	5.0		5.000		99.7	70	130			

Sample ID **LCS-31151**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **31151**	RunNo: **41990**
Prep Date: **4/10/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	63.8	116			
Surr: DNOP	4.9		5.000		97.1	70	130			

Sample ID **1704176-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Sample Location #1**	Batch ID: **31128**	RunNo: **41990**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1319273** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	220	9.3	46.51	25.23	420	51.6	130			S
Surr: DNOP	4.9		4.651		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID	**1704176-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**Sample Location #1**	Batch ID:	**31128**		RunNo:	**41990**					
Prep Date:	**4/7/2017**	Analysis Date:	**4/10/2017**		SeqNo:	**1319318**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	290	10	51.02	25.23	522	51.6	130	27.7	20	RS	
Surr: DNOP	5.7		5.102		111	70	130	0	0		

Sample ID	**LCS-31157**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**31157**		RunNo:	**42017**					
Prep Date:	**4/10/2017**	Analysis Date:	**4/11/2017**		SeqNo:	**1319773**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	5.1		5.000		102	70	130				

Sample ID	**MB-31157**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**31157**		RunNo:	**42017**					
Prep Date:	**4/10/2017**	Analysis Date:	**4/11/2017**		SeqNo:	**1319775**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	11		10.00		110	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **MB-31106**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **31106**	RunNo: **41937**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1317204** 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		88.6	54	150			

Sample ID **LCS-31106**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **31106**	RunNo: **41937**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1317205** 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	76.4	125			
Surr: BFB	990		1000		98.9	54	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **mb-31106**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **31106**	RunNo: **41936**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1328109** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.050								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.050								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **mb-31106**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **31106**	RunNo: **41936**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1328109** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.49		0.5000		97.9	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.7	70	130			

Sample ID **lcs-31106**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS**	Batch ID: **31106**	RunNo: **41936**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1328110** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	110	70	130			
Toluene	0.98	0.050	1.000	0	97.8	70	130			
Chlorobenzene	0.95	0.050	1.000	0	95.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID	**lcs-31106**	SampType:	**LCS**	TestCode:	**EPA Method 8260B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**31106**	RunNo:	**41936**					
Prep Date:	**4/5/2017**	Analysis Date:	**4/6/2017**	SeqNo:	**1328110**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.1	0.050	1.000	0	114	72	146			
Trichloroethene (TCE)	1.0	0.050	1.000	0	100	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		109	70	130			
Surr: Toluene-d8	0.49		0.5000		99.0	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **mb-31106**	SampType: **MBLK**	TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **PBS**	Batch ID: **31106**	RunNo: **41936**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1317261** 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	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.7	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.49		0.5000		97.9	70	130			

Sample ID **lcs-31106**	SampType: **LCS**	TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **LCSS**	Batch ID: **31106**	RunNo: **41936**
Prep Date: **4/5/2017**	Analysis Date: **4/6/2017**	SeqNo: **1317262** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	110	70	130			
Chlorobenzene	0.95	0.050	1.000	0	95.4	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	114	72	146			
Trichloroethene (TCE)	1.0	0.050	1.000	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		109	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.0	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		99.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **mb-31121**	SampType: **MBLK**	TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS**	Batch ID: **31121**	RunNo: **41984**
Prep Date: **4/6/2017**	Analysis Date: **4/7/2017**	SeqNo: **1318365** 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	0.18		0.2000		89.1	70	130			
Surr: 4-Bromofluorobenzene	0.22		0.2000		110	70	130			
Surr: Dibromofluoromethane	0.20		0.2000		101	70	130			
Surr: Toluene-d8	0.20		0.2000		98.9	70	130			

Sample ID **lcs-31121**	SampType: **LCS**	TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS**	Batch ID: **31121**	RunNo: **41984**
Prep Date: **4/6/2017**	Analysis Date: **4/7/2017**	SeqNo: **1318366** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.42	0.10	0.4000	0	105	70	130			
Chlorobenzene	0.38	0.10	0.4000	0	95.1	70	130			
1,1-Dichloroethene	0.37	0.10	0.4000	0	91.5	67.2	131			
Trichloroethene (TCE)	0.36	0.10	0.4000	0	89.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.18		0.2000		88.7	70	130			
Surr: 4-Bromofluorobenzene	0.22		0.2000		111	70	130			
Surr: Dibromofluoromethane	0.20		0.2000		98.9	70	130			
Surr: Toluene-d8	0.19		0.2000		96.3	70	130			

Sample ID **1704176-001ams**	SampType: **MS**	TestCode: **Volatiles by 8260B/1311**
Client ID: **Sample Location #1**	Batch ID: **31121**	RunNo: **41984**
Prep Date: **4/6/2017**	Analysis Date: **4/7/2017**	SeqNo: **1318368** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.10	0.4000	0.6401	103	70	130			
Chlorobenzene	0.37	0.10	0.4000	0	93.7	70	130			
1,1-Dichloroethene	0.35	0.10	0.4000	0	88.2	70	130			
Trichloroethene (TCE)	0.35	0.10	0.4000	0	88.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **1704176-001ams** SampType: **MS** TestCode: **Volatiles by 8260B/1311**

Client ID: **Sample Location #1** Batch ID: **31121** RunNo: **41984**

Prep Date: **4/6/2017** Analysis Date: **4/7/2017** SeqNo: **1318368** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		92.9	70	130			
Surr: 4-Bromofluorobenzene	0.22		0.2000		108	70	130			
Surr: Dibromofluoromethane	0.20		0.2000		99.8	70	130			
Surr: Toluene-d8	0.18		0.2000		91.9	70	130			

Sample ID **1704176-001amsd** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**

Client ID: **Sample Location #1** Batch ID: **31121** RunNo: **41984**

Prep Date: **4/6/2017** Analysis Date: **4/7/2017** SeqNo: **1318369** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.10	0.4000	0.6401	99.7	70	130	1.07	20	
Chlorobenzene	0.37	0.10	0.4000	0	91.7	70	130	2.16	20	
1,1-Dichloroethene	0.35	0.10	0.4000	0	88.0	70	130	0.316	20	
Trichloroethene (TCE)	0.36	0.10	0.4000	0	90.5	70	130	2.35	20	
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		95.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.22		0.2000		112	70	130	0	0	
Surr: Dibromofluoromethane	0.20		0.2000		102	70	130	0	0	
Surr: Toluene-d8	0.19		0.2000		95.6	70	130	0	0	

Sample ID **lcs-31139** SampType: **LCS** TestCode: **Volatiles by 8260B/1311**

Client ID: **LCSS** Batch ID: **31139** RunNo: **42005**

Prep Date: **4/7/2017** Analysis Date: **4/10/2017** SeqNo: **1319276** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.43	0.30	0.4000	0	109	70	130			
Chlorobenzene	0.40	0.30	0.4000	0	100	70	130			
1,1-Dichloroethene	0.47	0.30	0.4000	0	116	67.2	131			
Trichloroethene (TCE)	0.43	0.30	0.4000	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	0.17		0.2000		83.6	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.2000		103	70	130			
Surr: Dibromofluoromethane	0.21		0.2000		104	70	130			
Surr: Toluene-d8	0.18		0.2000		92.3	70	130			

Sample ID **mb-31139** SampType: **MBLK** TestCode: **Volatiles by 8260B/1311**

Client ID: **PBS** Batch ID: **31139** RunNo: **42005**

Prep Date: **4/7/2017** Analysis Date: **4/10/2017** SeqNo: **1319277** 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								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **mb-31139**	SampType: **MBLK**	TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS**	Batch ID: **31139**	RunNo: **42005**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1319277** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.17		0.2000		85.3	70	130			
Surr: 4-Bromofluorobenzene	0.20		0.2000		101	70	130			
Surr: Dibromofluoromethane	0.21		0.2000		105	70	130			
Surr: Toluene-d8	0.18		0.2000		92.0	70	130			

Sample ID **1704176-004ams**	SampType: **MS**	TestCode: **Volatiles by 8260B/1311**
Client ID: **Sample Location #4**	Batch ID: **31139**	RunNo: **42005**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1319294** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.4	0.30	0.3995	0.8792	119	70	130			
Chlorobenzene	0.43	0.30	0.3995	0	109	70	130			
1,1-Dichloroethene	0.49	0.30	0.3995	0	124	70	130			
Trichloroethene (TCE)	0.47	0.30	0.3995	0	118	70	130			
Surr: 1,2-Dichloroethane-d4	0.16		0.1998		81.9	70	130			
Surr: 4-Bromofluorobenzene	0.20		0.1998		101	70	130			
Surr: Dibromofluoromethane	0.20		0.1998		101	70	130			
Surr: Toluene-d8	0.19		0.1998		94.6	70	130			

Sample ID **1704176-004amsd**	SampType: **MSD**	TestCode: **Volatiles by 8260B/1311**
Client ID: **Sample Location #4**	Batch ID: **31139**	RunNo: **42005**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1319295** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.3	0.30	0.3995	0.8792	113	70	130	1.98	20	
Chlorobenzene	0.43	0.30	0.3995	0	106	70	130	2.16	20	
1,1-Dichloroethene	0.48	0.30	0.3995	0	121	70	130	1.98	20	
Trichloroethene (TCE)	0.46	0.30	0.3995	0	115	70	130	2.33	20	
Surr: 1,2-Dichloroethane-d4	0.17		0.1998		83.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.21		0.1998		105	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**
21-Apr-17

Client: Western Refining Southwest, Gallup
Project: Naptha Line Spill

Sample ID **1704176-004amsd** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**
Client ID: **Sample Location #4** Batch ID: **31139** RunNo: **42005**
Prep Date: **4/7/2017** Analysis Date: **4/10/2017** SeqNo: **1319295** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.20		0.1998		101	70	130	0	0	
Surr: Toluene-d8	0.19		0.1998		94.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **MB-31138**	SampType: **MBLK**	TestCode: **EPA Method 8310: PAHs**
Client ID: **PBS**	Batch ID: **31138**	RunNo: **41983**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318361** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Acenaphthylene	ND	0.25								
Acenaphthene	ND	0.25								
Fluorene	ND	0.030								
Phenanthrene	0.0012	0.015								J
Anthracene	ND	0.015								
Fluoranthene	ND	0.020								
Pyrene	ND	0.025								
Benz(a)anthracene	ND	0.010								
Chrysene	ND	0.010								
Benzo(b)fluoranthene	ND	0.010								
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	0.00050	0.010								J
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	0.00050	0.010								J
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.29		0.5000		58.0	32.4	163			

Sample ID **LCS-31138**	SampType: **LCS**	TestCode: **EPA Method 8310: PAHs**
Client ID: **LCSS**	Batch ID: **31138**	RunNo: **41983**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318362** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.2	0.25	2.000	0	60.9	38.1	121			
1-Methylnaphthalene	1.3	0.25	2.000	0	65.7	39.8	121			
2-Methylnaphthalene	1.3	0.25	2.000	0	63.5	38.6	119			
Acenaphthylene	1.3	0.25	2.000	0	63.5	56.9	119			
Acenaphthene	1.3	0.25	2.000	0	63.3	39.1	121			
Fluorene	0.12	0.030	0.2000	0	61.3	35.8	116			
Phenanthrene	0.065	0.015	0.1006	0	64.4	34.3	126			
Anthracene	0.054	0.015	0.1006	0	54.2	31.2	117			
Fluoranthene	0.13	0.020	0.2006	0	64.6	31.2	136			
Pyrene	0.14	0.025	0.2000	0	71.8	40.8	128			
Benz(a)anthracene	0.014	0.010	0.02000	0	68.8	25.7	136			
Chrysene	0.062	0.010	0.1006	0	61.9	34.2	129			
Benzo(b)fluoranthene	0.016	0.010	0.02500	0	63.0	33.2	121			
Benzo(k)fluoranthene	0.0090	0.010	0.01250	0	72.0	35.7	130			J

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **LCS-31138**	SampType: **LCS**	TestCode: **EPA Method 8310: PAHs**
Client ID: **LCSS**	Batch ID: **31138**	RunNo: **41983**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318362** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.0082	0.010	0.01250	0	66.0	27	131			J
Dibenz(a,h)anthracene	0.016	0.010	0.02500	0	65.0	29.4	131			
Benzo(g,h,i)perylene	0.018	0.010	0.02500	0	73.0	32.9	130			
Indeno(1,2,3-cd)pyrene	0.028	0.010	0.05002	0	56.5	28.2	135			
Surr: Benzo(e)pyrene	0.36		0.5000		71.6	32.4	163			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID	**MB-31159**	SampType:	**MBLK**	TestCode:	**MERCURY, TCLP**					
Client ID:	**PBW**	Batch ID:	**31159**	RunNo:	**42003**					
Prep Date:	**4/10/2017**	Analysis Date:	**4/10/2017**	SeqNo:	**1319243**	Units:	**mg/L**			

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

Sample ID	**LCS-31159**	SampType:	**LCS**	TestCode:	**MERCURY, TCLP**					
Client ID:	**LCSW**	Batch ID:	**31159**	RunNo:	**42003**					
Prep Date:	**4/10/2017**	Analysis Date:	**4/10/2017**	SeqNo:	**1319244**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.020	0.005000	0	100	80	120			J

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **MB-31140**	SampType: **MBLK**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW**	Batch ID: **31140**	RunNo: **41992**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318852** 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-31140**	SampType: **LCS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW**	Batch ID: **31140**	RunNo: **41992**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318853** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.52	5.0	0.5000	0	104	80	120			J
Barium	0.48	100	0.5000	0	97.0	80	120			J
Cadmium	0.51	1.0	0.5000	0	101	80	120			J
Chromium	0.49	5.0	0.5000	0	98.0	80	120			J
Lead	0.47	5.0	0.5000	0	94.3	80	120			J
Selenium	0.50	1.0	0.5000	0	100	80	120			J
Silver	0.10	5.0	0.1000	0	104	80	120			J

Sample ID **1704176-001AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Sample Location #1**	Batch ID: **31140**	RunNo: **41992**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318856** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.53	5.0	0.5000	0	105	75	125			J
Barium	3.5	100	0.5000	3.095	83.8	75	125			J
Cadmium	0.50	1.0	0.5000	0	100	75	125			J
Chromium	0.47	5.0	0.5000	0	93.8	75	125			J
Lead	0.45	5.0	0.5000	0	90.4	75	125			J
Selenium	0.46	1.0	0.5000	0	92.6	75	125			J
Silver	0.10	5.0	0.1000	0	102	75	125			J

Sample ID **1704176-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Sample Location #1**	Batch ID: **31140**	RunNo: **41992**
Prep Date: **4/7/2017**	Analysis Date: **4/10/2017**	SeqNo: **1318857** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.54	5.0	0.5000	0	108	75	125	3.04	20	J

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1704176**

21-Apr-17

Client: Western Refining Southwest, Gallup

Project: Naptha Line Spill

Sample ID **1704176-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **Sample Location #1** Batch ID: **31140** RunNo: **41992**

Prep Date: **4/7/2017** Analysis Date: **4/10/2017** SeqNo: **1318857** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	3.6	100	0.5000	3.095	107	75	125	3.31	20	J
Cadmium	0.51	1.0	0.5000	0	103	75	125	2.26	20	J
Chromium	0.48	5.0	0.5000	0	95.6	75	125	1.92	20	J
Lead	0.46	5.0	0.5000	0	92.5	75	125	2.20	20	J
Selenium	0.48	1.0	0.5000	0	96.1	75	125	3.72	20	J
Silver	0.10	5.0	0.1000	0	105	75	125	3.19	20	J

Sample ID **1704176-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **Sample Location #1** Batch ID: **31140** RunNo: **41992**

Prep Date: **4/7/2017** Analysis Date: **4/10/2017** SeqNo: **1318866** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.56	10	0.5000	0	111	75	125			J
Barium	3.7	200	0.5000	3.326	74.3	75	125			JS
Cadmium	0.52	2.0	0.5000	0	104	75	125			J
Chromium	0.49	10	0.5000	0	98.1	75	125			J
Lead	0.48	10	0.5000	0	96.8	75	125			J
Selenium	0.45	2.0	0.5000	0	90.2	75	125			J
Silver	0.10	10	0.1000	0	102	75	125			J

Sample ID **1704176-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **Sample Location #1** Batch ID: **31140** RunNo: **41992**

Prep Date: **4/7/2017** Analysis Date: **4/10/2017** SeqNo: **1318867** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.58	10	0.5000	0	116	75	125	4.17	20	J
Barium	3.9	200	0.5000	3.326	112	75	125	4.99	20	J
Cadmium	0.54	2.0	0.5000	0	108	75	125	4.36	20	J
Chromium	0.51	10	0.5000	0	102	75	125	4.30	20	J
Lead	0.51	10	0.5000	0	101	75	125	4.49	20	J
Selenium	0.48	2.0	0.5000	0	96.6	75	125	6.86	20	J
Silver	0.11	10	0.1000	0	106	75	125	4.03	20	J

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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: **1704176** RcptNo: **1**

Received By: **Ashley Gallegos** **4/5/2017 2:18:00 PM**

Completed By: **Ashley Gallegos** **4/5/2017 3:05:18 PM**

Reviewed By: AJ 04/05/17

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	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	3.9	Good	Not Present			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

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 (marked with X)

Project Name: Naptha Line Spill

Project #:

Project Manager: William Bailey

AD /JV

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 39

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

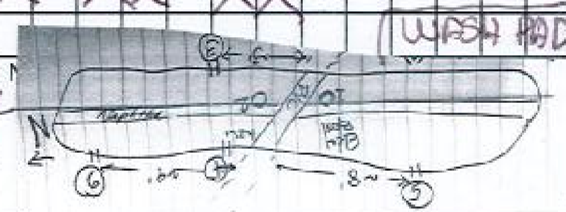
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1704176	R8015 D (DRO/GRO/MRO)CI		8260B - TCLP	8270 - TCLP	RCRA 8 METALS - TCLP	RCI	PAINT FILTER	8310 PAH	SULFATES			Add 8260 Full List 6 - 9 of 4/4/17 [illegible]		Air Bubbles (Y or N)
3/30/2017	11:30	Soil	Sample Location # 1	2 - 9oz	None	-001	X		X		X	X		X	X					
3/30/2017	11:35	Soil	Sample Location # 2	2 - 9oz	None	-002	X		X		X	X		X	X					
3/30/2017	11:40	Soil	Sample Location # 3	2 - 9oz	None	-003	X		X		X	X		X	X					
3/30/2017	11:45	Soil	Sample Location # 4	2 - 9oz	None	-004	X		X		X	X		X	X					
3/30/2017	11:50	Soil	Sample Location # 5	2 - 9oz	None	-005	X		X		X	X		X	X					
3-30-17	11:55	Soil	Sample location #6	2-9oz	None	-006	X		X		X	X		X	X					

Date: 02-10-17	Time: 11:00	Relinquished by: Alvin Dorsey [signature]	Received by: [signature]	Date 04/05/17	Time 1415
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: T101/102 (101) (102)



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.

ATTACHMENT B

0012

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NMD000333211	1	888-444-7077	010637254 GBF

GENERATOR

5. Generator's Name and Mailing Address
Western Refining Company - Gallup Refinery
I-40 @ Exit 39
Jamestown, NM 87347
Attn ATTN: Janelle Vestal
Generator's Phone: 505 863-1749

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: CHEMICAL TRANSPORTATION, INC.
U.S. EPA ID Number: AZT000610003

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
US Ecology Texas
3277 County Road 69
Robstown, TX 78380
Facility's Phone: 800 242-9208
U.S. EPA ID Number: TXD069452340

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3077, Hazardous waste, solid, n.o.s. (Benzene, Xylene), 9, PGIII	001	CM	00010	T	D018		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
PROFILE# 09010359-0, TX Waste Code OUT3301H, ERG#171

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: ALVIN Dorsey
Signature
Month 06 Day 28 Year 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name
Signature
Month 6 Day 28 Year 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

042

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

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NMO 0 0 0 3 3 3 2 1 1	1	888-466-7077	002837255 GBF

GENERATOR

5. Generator's Name and Mailing Address
Western Refining Company - Gallup Refinery
I-40 @ Exit 39
Jamestown, NM 87347
Attn: ATTN: Janelle Yoder
Generator's Phone: 505 863-1713

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
CHEMICAL TRANSPORTATION, INC.
U.S. EPA ID Number: AZT0500100008

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
US Ecology Texas
9777 County Road 93
Robstown, TX 78380
Facility's Phone: 800 242-3269
U.S. EPA ID Number: TXD088945340

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA9077, Hazardous waste, solid, n.o.s. (Benzene, Xylene), 9, PGIII	001	CM	00010	T	D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
PROFILE# 090101359-0, TX Waste Code OUT3301H, ERG#171

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: ALVIN DORSEY
Signature:
Month: 06 Day: 29 Year: 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name:
Signature:
Month: 6 Day: 29 Year: 17

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name:
Signature:
Month: Day: Year:

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

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

Form C-141
Revised April 3, 2017

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: Cheryl Johnson
Address: I-40 Exit 39, Jamestown, NM 87347	Telephone No: 505 722 0231
Facility Name: 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	15N	15W					McKinley

Latitude 35◦29'28.56"N Longitude 108◦25'24.24"W NAD83

NATURE OF RELEASE

Type of Release: Gasoline spill (89 Octane)	Volume of Release: Estimated at 8900 gallons of gasoline	Volume Recovered: 89,000 gallons of gasoline recovered via vacuum truck.
Source of Release: Valve left open to sewer	Date and Hour of Occurrence: 05/07/17 @ 0800 hours	Date and Hour of Discovery: 05/07/17 @ 0800 hours
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? C Chavez/OCD; K VanHorn/NMED-HWB; B Powell/OCD; C Smith/NMED	
By Whom? Cheryl Johnson	Date and Hour: 05/07/17 @ 1145 hrs	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.* At 0800 hours, operator noticed gasoline pooling underneath the pipe rack located on the west side of the rail car loading area. Operator observed that gasoline had pooled in and around the pipe rack area and was flowing into the sewer box located near the railcar loading area. Offsites supervisor, Kurtz and Environmental were immediately notified. Maintenance was also contacted to begin vacuuming out sewer box. When level in sewer box was lowered it was observed that a ¾" valve going into a sewer cup was draining (valve was in the open position). Valve(s) were immediately closed at the gasoline additive tank. The sewer cup overflowed onto a concrete pad underneath the pipe rack and into a sewer drain. Temperature 45°F, calm, partly cloudy. No personnel injuries were reported and no fires occurred from this incident.

Describe Area Affected and Cleanup Action Taken.* The overflow was contained inside a concrete berm underneath the pipe rack which then flowed in a south, south-easterly direction towards a sewer drain (Figure 1, #2). The overflow was pumped out using a vacuum truck and approximately three loads was collected from this area as well as from the sump box located on the north side of the pipe rack (Figure 1. #3). A sample of the product was collected and analyzed in our Gallup Facility Laboratory to verify product. An estimated 8900 gallons of gasoline was picked up via vacuum truck and placed back into the process at the slop tank. Clean-up activities were not immediately initiated as the majority of the spill was contained inside a concrete pad.

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: Cheryl Johnson	Approved by Environmental Specialist:	
Title: Environmental Specialist	Approval Date:	Expiration Date:
E-mail Address: Cheryl.A.johnson@Andeavor.com	Conditions of Approval:	Attached ☐
Date: 8/30/2017 Phone:505-722-0231		

* Attach Additional Sheets If Necessary

FIGURE 1


T-563
T-562
Rail Rack Sump
N
Additive Tank - Source of Leak
Rail Car Loading Area
Area of Spill
Sewer Box
T-581
T-582
Google earth
Imagery Date: 3/18/2015 1997
35°29'28.68" N 108°25'23.40" W elev 6942 ft
Eye alt 7888 ft