

AP - 111

C-141s (4)

Appendix F
Photographs of Soil Sampling Locations
September 14, 2016



2016/09/14



SV2
8256
L

BAKER
1-800-BAKER12
TANKS / PUMPS / FILTRATION
RENTALS & SALES

FLOAT

F.

E.

1-800-BAKER12

SV2
9632
L

BAKER
1-800-BAKER12
TANKS / PUMPS / FILTRATION
RENTALS & SALES

ASO

BAKER
1-800-BAKER12
TANKS / PUMPS / FILTRATION
RENTALS & SALES

BAKER
1-800-BAKER12
TANKS / PUMPS / FILTRATION
RENTALS & SALES

2016/09/14



2016/09/14



2016/09/14



2016/09/14



2016/09/14



2016/09/14



2016/09/14

Appendix B

Analytical Data Reports



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

June 20, 2016

Cheryl Johnson

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: ASO/Caustic Spill @ Baker Tank

OrderNo.: 1606180

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/3/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606180

Date Reported: 6/20/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO/Caustic Spill Bin 22023

Project: ASO/Caustic Spill @ Baker Tank

Collection Date: 5/31/2016 10:42:00 AM

Lab ID: 1606180-001

Matrix: SLUDGE

Received Date: 6/3/2016 2:17:00 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)	8000	170	940	D	mg/Kg	100	6/7/2016 9:27:34 AM	25700
Motor Oil Range Organics (MRO)	ND	4700	4700	D	mg/Kg	100	6/7/2016 9:27:34 AM	25700
Surr: DNOP	0	0	70-130	SD	%Rec	100	6/7/2016 9:27:34 AM	25700
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	190	10	50		mg/Kg	10	6/7/2016 3:07:33 PM	25678
Surr: BFB	203	0	80-120	S	%Rec	10	6/7/2016 3:07:33 PM	25678
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00050	0.020		mg/L	1	6/8/2016 6:44:28 AM	25712
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Arsenic	ND	0.011	5.0		mg/L	1	6/8/2016 7:54:51 AM	25711
Barium	1.2	0.00060	100	J	mg/L	1	6/8/2016 7:54:51 AM	25711
Cadmium	ND	0.00090	1.0		mg/L	1	6/8/2016 7:54:51 AM	25711
Chromium	ND	0.0014	5.0		mg/L	1	6/8/2016 7:54:51 AM	25711
Lead	ND	0.0013	5.0		mg/L	1	6/8/2016 7:54:51 AM	25711
Selenium	ND	0.019	1.0		mg/L	1	6/8/2016 7:54:51 AM	25711
Silver	ND	0.0013	5.0		mg/L	1	6/8/2016 7:54:51 AM	25711
EPA METHOD 8270C TCLP							Analyst: JDC	
2-Methylphenol	ND	0.047	200		mg/L	1	6/20/2016 11:16:29 AM	25863
3+4-Methylphenol	ND	0.14	200		mg/L	1	6/20/2016 11:16:29 AM	25863
Phenol	ND	200	200		mg/L	1	6/20/2016 11:16:29 AM	25863
2,4-Dinitrotoluene	ND	0.029	0.13		mg/L	1	6/20/2016 11:16:29 AM	25863
Hexachlorobenzene	ND	0.033	0.13		mg/L	1	6/20/2016 11:16:29 AM	25863
Hexachlorobutadiene	ND	0.082	0.50		mg/L	1	6/20/2016 11:16:29 AM	25863
Hexachloroethane	ND	0.065	3.0		mg/L	1	6/20/2016 11:16:29 AM	25863
Nitrobenzene	ND	0.039	2.0		mg/L	1	6/20/2016 11:16:29 AM	25863
Pentachlorophenol	ND	0.029	100		mg/L	1	6/20/2016 11:16:29 AM	25863
Pyridine	ND	0.097	5.0		mg/L	1	6/20/2016 11:16:29 AM	25863
2,4,5-Trichlorophenol	ND	0.032	400		mg/L	1	6/20/2016 11:16:29 AM	25863
2,4,6-Trichlorophenol	ND	0.042	2.0		mg/L	1	6/20/2016 11:16:29 AM	25863
Cresols, Total	ND	0.18	200		mg/L	1	6/20/2016 11:16:29 AM	25863
Surr: 2-Fluorophenol	66.5	0	19-121		%Rec	1	6/20/2016 11:16:29 AM	25863
Surr: Phenol-d5	56.3	0	31.8-117		%Rec	1	6/20/2016 11:16:29 AM	25863
Surr: 2,4,6-Tribromophenol	111	0	31.3-139		%Rec	1	6/20/2016 11:16:29 AM	25863
Surr: Nitrobenzene-d5	88.4	0	48.2-128		%Rec	1	6/20/2016 11:16:29 AM	25863
Surr: 2-Fluorobiphenyl	85.8	0	58.4-114		%Rec	1	6/20/2016 11:16:29 AM	25863
Surr: 4-Terphenyl-d14	72.5	0	17.4-141		%Rec	1	6/20/2016 11:16:29 AM	25863

EPA METHOD 8260B: TCLP COMPOUNDS

Analyst: **DJF**

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606180

Date Reported: 6/20/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO/Caustic Spill Bin 22023

Project: ASO/Caustic Spill @ Baker Tank

Collection Date: 5/31/2016 10:42:00 AM

Lab ID: 1606180-001

Matrix: SLUDGE

Received Date: 6/3/2016 2:17:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	ND	0.20	0.50		ppm	10	6/8/2016 2:30:12 PM	25678
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	6/8/2016 2:30:12 PM	25678
2-Butanone	ND	0.29	200		ppm	10	6/8/2016 2:30:12 PM	25678
Carbon tetrachloride	ND	0.033	0.50		ppm	10	6/8/2016 2:30:12 PM	25678
Chlorobenzene	ND	0.041	100		ppm	10	6/8/2016 2:30:12 PM	25678
Chloroform	0.062	0.038	6.0	J	ppm	10	6/8/2016 2:30:12 PM	25678
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	6/8/2016 2:30:12 PM	25678
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	6/8/2016 2:30:12 PM	25678
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	6/8/2016 2:30:12 PM	25678
Trichloroethene (TCE)	ND	0.053	0.50		ppm	10	6/8/2016 2:30:12 PM	25678
Vinyl chloride	ND	0.041	0.20		ppm	10	6/8/2016 2:30:12 PM	25678
Surr: 1,2-Dichloroethane-d4	102		70-130		%Rec	10	6/8/2016 2:30:12 PM	25678
Surr: 4-Bromofluorobenzene	123		70-130		%Rec	10	6/8/2016 2:30:12 PM	25678
Surr: Dibromofluoromethane	93.2		70-130		%Rec	10	6/8/2016 2:30:12 PM	25678
Surr: Toluene-d8	101		70-130		%Rec	10	6/8/2016 2:30:12 PM	25678

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606180**

Date Reported: **6/20/2016**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO/Caustic Soill Bin ACT2056

Project: ASO/Caustic Spill @ Baker Tank

Collection Date: 5/31/2016 10:12:00 AM

Lab ID: 1606180-002

Matrix: SLUDGE

Received Date: 6/3/2016 2:17:00 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)	26000	180	990	D	mg/Kg	100	6/7/2016 9:49:12 AM	25700
Motor Oil Range Organics (MRO)	ND	5000	5000	D	mg/Kg	100	6/7/2016 9:49:12 AM	25700
Surr: DNOP	0	0	70-130	SD	%Rec	100	6/7/2016 9:49:12 AM	25700
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	420	52	250		mg/Kg	50	6/7/2016 11:35:54 AM	25678
Surr: BFB	142	0	80-120	S	%Rec	50	6/7/2016 11:35:54 AM	25678
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00050	0.020		mg/L	1	6/8/2016 6:46:23 AM	25712
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Arsenic	ND	0.011	5.0		mg/L	1	6/8/2016 7:59:55 AM	25711
Barium	0.75	0.00060	100	J	mg/L	1	6/8/2016 7:59:55 AM	25711
Cadmium	ND	0.00090	1.0		mg/L	1	6/8/2016 7:59:55 AM	25711
Chromium	ND	0.0014	5.0		mg/L	1	6/8/2016 7:59:55 AM	25711
Lead	ND	0.0013	5.0		mg/L	1	6/8/2016 7:59:55 AM	25711
Selenium	ND	0.019	1.0		mg/L	1	6/8/2016 7:59:55 AM	25711
Silver	ND	0.0013	5.0		mg/L	1	6/8/2016 7:59:55 AM	25711
EPA METHOD 8270C TCLP							Analyst: JDC	
2-Methylphenol	ND	0.047	200		mg/L	1	6/20/2016 11:46:27 AM	25863
3+4-Methylphenol	ND	0.14	200		mg/L	1	6/20/2016 11:46:27 AM	25863
Phenol	ND	200	200		mg/L	1	6/20/2016 11:46:27 AM	25863
2,4-Dinitrotoluene	ND	0.029	0.13		mg/L	1	6/20/2016 11:46:27 AM	25863
Hexachlorobenzene	ND	0.033	0.13		mg/L	1	6/20/2016 11:46:27 AM	25863
Hexachlorobutadiene	ND	0.082	0.50		mg/L	1	6/20/2016 11:46:27 AM	25863
Hexachloroethane	ND	0.065	3.0		mg/L	1	6/20/2016 11:46:27 AM	25863
Nitrobenzene	ND	0.039	2.0		mg/L	1	6/20/2016 11:46:27 AM	25863
Pentachlorophenol	ND	0.029	100		mg/L	1	6/20/2016 11:46:27 AM	25863
Pyridine	ND	0.097	5.0		mg/L	1	6/20/2016 11:46:27 AM	25863
2,4,5-Trichlorophenol	ND	0.032	400		mg/L	1	6/20/2016 11:46:27 AM	25863
2,4,6-Trichlorophenol	ND	0.042	2.0		mg/L	1	6/20/2016 11:46:27 AM	25863
Cresols, Total	ND	0.18	200		mg/L	1	6/20/2016 11:46:27 AM	25863
Surr: 2-Fluorophenol	54.1	0	19-121		%Rec	1	6/20/2016 11:46:27 AM	25863
Surr: Phenol-d5	43.2	0	31.8-117		%Rec	1	6/20/2016 11:46:27 AM	25863
Surr: 2,4,6-Tribromophenol	97.4	0	31.3-139		%Rec	1	6/20/2016 11:46:27 AM	25863
Surr: Nitrobenzene-d5	77.5	0	48.2-128		%Rec	1	6/20/2016 11:46:27 AM	25863
Surr: 2-Fluorobiphenyl	71.1	0	58.4-114		%Rec	1	6/20/2016 11:46:27 AM	25863
Surr: 4-Terphenyl-d14	59.6	0	17.4-141		%Rec	1	6/20/2016 11:46:27 AM	25863

EPA METHOD 8260B: TCLP COMPOUNDS

Analyst: **DJF**

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606180

Date Reported: 6/20/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO/Caustic Soill Bin ACT2056

Project: ASO/Caustic Spill @ Baker Tank

Collection Date: 5/31/2016 10:12:00 AM

Lab ID: 1606180-002

Matrix: SLUDGE

Received Date: 6/3/2016 2:17:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	ND	0.20	0.50		ppm	10	6/8/2016 2:58:36 PM	25678
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	6/8/2016 2:58:36 PM	25678
2-Butanone	ND	0.29	200		ppm	10	6/8/2016 2:58:36 PM	25678
Carbon tetrachloride	ND	0.033	0.50		ppm	10	6/8/2016 2:58:36 PM	25678
Chlorobenzene	ND	0.041	100		ppm	10	6/8/2016 2:58:36 PM	25678
Chloroform	0.060	0.038	6.0	J	ppm	10	6/8/2016 2:58:36 PM	25678
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	6/8/2016 2:58:36 PM	25678
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	6/8/2016 2:58:36 PM	25678
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	6/8/2016 2:58:36 PM	25678
Trichloroethene (TCE)	ND	0.054	0.50		ppm	10	6/8/2016 2:58:36 PM	25678
Vinyl chloride	ND	0.041	0.20		ppm	10	6/8/2016 2:58:36 PM	25678
Surr: 1,2-Dichloroethane-d4	102		70-130		%Rec	10	6/8/2016 2:58:36 PM	25678
Surr: 4-Bromofluorobenzene	198		70-130	S	%Rec	10	6/8/2016 2:58:36 PM	25678
Surr: Dibromofluoromethane	92.3		70-130		%Rec	10	6/8/2016 2:58:36 PM	25678
Surr: Toluene-d8	99.5		70-130		%Rec	10	6/8/2016 2:58:36 PM	25678

Refer to the QC Summary report and 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	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Reactive Cyanide	0.295		0.250	1	06/09/2016 16:03	<u>WG879236</u>

Co

²Tc

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Reactive Sulfide	ND		25.0	1	06/08/2016 13:01	<u>WG878419</u>

³Ss⁴Cn

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
				date / time	
Corrosivity	Non-Corrosive		1	06/08/2016 13:44	<u>WG878344</u>

⁵Sr⁶Qc

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	Deg. F			date / time	
Ignitability	DNI at 170 F		1	06/08/2016 14:04	<u>WG878418</u>

⁷Gl⁸Al⁹Sc



Collected date/time: 05/31/16 10:12

L839738

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	06/08/2016 13:02	WG878747

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	06/08/2016 13:01	WG878419

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity	Non-Corrosive		1	06/08/2016 13:44	WG878344

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170 F		1	06/08/2016 14:04	WG878418



Method Blank (MB)

(MB) R3142321-1 06/08/16 12:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Reactive Cyanide	U		0.0390	0.250

Laboratory Control Sample #1 (CS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3142321-2 06/08/16 12:54 • (LCS) R3142321-3 06/08/16 12:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Reactive Cyanide	48.4	32.4	29.3	67.0	61.0	50.0-150			10.0	20

L839738-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L839738-02 06/08/16 13:02 • (MS) R3142321-4 06/08/16 13:05 • (MSD) R3142321-5 06/08/16 13:06

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Reactive Cyanide	3.33	ND	3.95	3.38	115	98.0	1	80.0-120			15.0	20

	² Tc	³ Ss	⁴ Cn	⁵ Si	⁶Qc	⁷ Gl	⁸ Al	⁹ Sc
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ACCOUNT:
Hall Environmental Analysis Laboratory

PROJECT:

SDG:
L839738

DATE/TIME: 06/09/16 18:14

Wet Chemistry by Method 9012 B

L839738-01

Method Blank (MB)

(MB) R3142633-1 06/09/16 15:39				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg	mg/kg	mg/kg	mg/kg
Reactive Cyanide	U	0.0390	0.250	

L839324-01 Original Sample (OS) • Duplicate (DUP)

(OS) L839324-01 06/09/16 15:50 • (DUP) R3142633-4 06/09/16 15:51				
Analyte	Original Result	DUP Result	DUP RPD	DUP RPD Limits
	mg/kg	mg/kg	%	%
Reactive Cyanide	ND	ND	0.000	20

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

(LCS) R3142633-2 06/09/16 15:40 • (LCSD) R3142633-3 06/09/16 15:41				
Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
	mg/kg	mg/kg	%	%
Reactive Cyanide	48.4	51.0	105	50.0-150
				LCSD Rec.
				%
				114
				LCSD Qualifier
				%
				8.00
				RPD Limits
				%
				20





QUALITY CONTROL SUMMARY

WG878419

Wet Chemistry by Method 9034-9030B

L839738-01.02

Method Blank (MB)

(MB) WG878419-3 06/08/16 13:01				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg	mg/kg	mg/kg	mg/kg
Reactive Sulfide	U	7.63	25.0	25.0

L839132-01 Original Sample (OS) • Duplicate (DUP)

(OS) L839132-01 06/08/16 13:01 • (DUP) WG878419-1 06/08/16 13:01				
Analyte	Original Result	DUP Result	DUP RPD	DUP Qualifier
	mg/kg	mg/kg	%	%
Reactive Sulfide	1280	1260	1.27	20

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

(LCS) WG878419-4 06/08/16 13:01 • (LCSD) WG878419-5 06/08/16 13:01				
Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
	mg/kg	mg/kg	%	%
Reactive Sulfide	100	103	96.1	70.0-130
			LCSD Rec.	RPD Limits
			%	%
			96.1	6.93
				20

ACCOUNT:
Hall Environmental Analysis Laboratory

PROJECT:

SDG:
L839738

DATE/TIME:
06/09/16 18:14

1	2	3	4	5	6	7	8	9
	Tc	Ss	Cn	Sr	Qc	Gl	Al	Sc

WG878344

Wet Chemistry by Method 9045D

QUALITY CONTROL SUMMARY

L839738-01.02

ONE LAB. NATIONWIDE.



L839738-01 Original Sample (OS) • Duplicate (DUP)

(OS) L839738-01 06/08/16 13:44 • (DUP) WG878344-3 06/08/16 13:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Corrosivity	Non-Corrosive	Non-Corrosive	1	0.000		10

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

(LCS) WG878344-1 06/08/16 13:44 • (LCS D) WG878344-2 06/08/16 13:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCS D Qualifier	RPD %	RPD Limits %
Corrosivity	6.43	6.36	6.36	98.9	98.9	98.4-102			0.000	10

1	2	3	4	5	6	7	8	9
	Tc	Ss	Cn	Sr	Qc	Gl	Al	Sc

ACCOUNT:
Hall Environmental Analysis Laboratory

PROJECT:

SDG:
L839738

DATE/TIME:
06/09/16 18:14



QUALITY CONTROL SUMMARY

L839738-01.02

WG878418

Wet Chemistry by Method D93/1010A

L839738-01 Original Sample (OS) • Duplicate (DUP)

(OS) L839738-01 06/08/16 14:04 • (DUP) WG878418-1 06/08/16 14:04

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

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

(LCS) WG878418-2 06/08/16 14:04 • (LCSD) WG878418-3 06/08/16 14:04

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	-	82.5		82.5		101		101		93.0-107				0.000		20			

ACCOUNT:
Hall Environmental Analysis Laboratory

PROJECT:

SDG:
L839738

DATE/TIME:
06/09/16 18:14

2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	MB-25700	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 25700			RunNo: 34721					
Prep Date:	6/7/2016	Analysis Date: 6/7/2016			SeqNo: 1071404		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		101	70	130			

Sample ID	LCS-25700		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 25700		RunNo: 34721					
Prep Date:	6/7/2016		Analysis Date: 6/7/2016		SeqNo: 1071405		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	93.0	62.6	124			
Surr: DNOP	4.5		5.000		90.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	MB-25678		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 25678		RunNo: 34739					
Prep Date:	6/6/2016		Analysis Date: 6/7/2016		SeqNo: 1072052		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	1000		1000		102	80	120			

Sample ID	LCS-25678		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 25678		RunNo: 34739					
Prep Date:	6/6/2016		Analysis Date: 6/7/2016		SeqNo: 1072053		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	80	120			
Surr: BFB	1100		1000		110	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	mb-25678		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	25678		RunNo:	34770			
Prep Date:	6/6/2016		Analysis Date:	6/8/2016		SeqNo:	1073650	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	0.066	20								J
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	0.0067	0.60								J
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	0.49		0.5000		98.7	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.4	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.7	70	130			
Surr: Toluene-d8	0.50		0.5000		99.1	70	130			

Sample ID	lcs-25678		SampType:	LCS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	LCSS		Batch ID:	25678		RunNo:	34770			
Prep Date:	6/6/2016		Analysis Date:	6/8/2016		SeqNo:	1073651	Units:	ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	70	130			
Chlorobenzene	0.96	0.050	1.000	0	95.6	70	130			
1,1-Dichloroethene	1.2	0.050	1.000	0	116	70	130			
Trichloroethene (TCE)	0.90	0.050	1.000	0	89.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.8	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.8	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		95.0	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID	1606180-001ams		SampType:	MS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	ASO/Caustic Spill B		Batch ID:	25678		RunNo:	34770			
Prep Date:	6/6/2016		Analysis Date:	6/8/2016		SeqNo:	1073653	Units:	ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.50	1.000	0	95.6	49.2	155			
Chlorobenzene	0.85	0.50	1.000	0	85.0	53.2	150			
1,1-Dichloroethene	0.81	0.50	1.000	0	81.2	34.2	163			
Trichloroethene (TCE)	0.95	0.50	1.000	0	94.8	48.2	151			
Surr: 1,2-Dichloroethane-d4	5.1		5.000		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	1606180-001ams	SampType:	MS	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	ASO/Caustic Spill B	Batch ID:	25678	RunNo:	34770					
Prep Date:	6/6/2016	Analysis Date:	6/8/2016	SeqNo:	1073653	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	6.2		5.000		124	70	130			
Surr: Dibromofluoromethane	4.8		5.000		95.9	70	130			
Surr: Toluene-d8	5.0		5.000		99.3	70	130			

Sample ID	1606180-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	ASO/Caustic Spill B	Batch ID:	25678	RunNo:	34770					
Prep Date:	6/6/2016	Analysis Date:	6/8/2016	SeqNo:	1073667	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.50	1.000	0	99.4	49.2	155	3.94	20	
Chlorobenzene	0.94	0.50	1.000	0	93.6	53.2	150	9.65	20	
1,1-Dichloroethene	0.92	0.50	1.000	0	91.6	34.2	163	12.0	20	
Trichloroethene (TCE)	0.93	0.50	1.000	0	92.6	48.2	151	2.29	20	
Surr: 1,2-Dichloroethane-d4	5.2		5.000		103	70	130	0	0	
Surr: 4-Bromofluorobenzene	5.8		5.000		115	70	130	0	0	
Surr: Dibromofluoromethane	4.7		5.000		94.0	70	130	0	0	
Surr: Toluene-d8	5.0		5.000		99.5	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	mb-25726		SampType: MBLK		TestCode: EPA Method 8270C TCLP					
Client ID:	PBS		Batch ID: 25726		RunNo: 34835					
Prep Date:	6/8/2016		Analysis Date: 6/10/2016		SeqNo: 1076110		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	0.096		0.2000		48.2	19	121			
Surr: Phenol-d5	0.074		0.2000		36.8	31.8	117			
Surr: 2,4,6-Tribromophenol	0.14		0.2000		70.8	31.3	139			
Surr: Nitrobenzene-d5	0.067		0.1000		66.8	48.2	128			
Surr: 2-Fluorobiphenyl	0.062		0.1000		62.1	58.4	114			
Surr: 4-Terphenyl-d14	0.045		0.1000		45.0	17.4	141			

Sample ID	mb-25863		SampType: MBLK		TestCode: EPA Method 8270C TCLP					
Client ID:	PBS		Batch ID: 25863		RunNo: 35016					
Prep Date:	6/15/2016		Analysis Date: 6/20/2016		SeqNo: 1082366		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.12		0.2000		59.3	19	121			
Surr: Phenol-d5	0.098		0.2000		48.9	31.8	117			
Surr: 2,4,6-Tribromophenol	0.18		0.2000		87.9	31.3	139			
Surr: Nitrobenzene-d5	0.081		0.1000		80.6	48.2	128			
Surr: 2-Fluorobiphenyl	0.070		0.1000		70.1	58.4	114			
Surr: 4-Terphenyl-d14	0.058		0.1000		58.0	17.4	141			

Sample ID	lcs-25863		SampType: LCS		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS		Batch ID: 25863		RunNo: 35016					
Prep Date:	6/15/2016		Analysis Date: 6/20/2016		SeqNo: 1082367		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.067	0.010	0.1000	0	67.4	37.6	110			
3+4-Methylphenol	0.15	0.010	0.2000	0	73.8	30.5	149			
2,4-Dinitrotoluene	0.068	0.010	0.1000	0	68.5	24.9	93.7			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	Ics-25863		SampType: LCS		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS		Batch ID: 25863		RunNo: 35016					
Prep Date:	6/15/2016		Analysis Date: 6/20/2016		SeqNo: 1082367		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobenzene	0.087	0.010	0.1000	0	86.9	40	114			
Hexachlorobutadiene	0.053	0.010	0.1000	0	52.8	37.4	119			
Hexachloroethane	0.046	0.010	0.1000	0	46.0	33.8	105			
Nitrobenzene	0.069	0.010	0.1000	0	68.7	33.4	115			
Pentachlorophenol	0.076	0.010	0.1000	0	76.5	27.9	90.3			
Pyridine	0.050	0.010	0.1000	0	50.1	29.3	105			
2,4,5-Trichlorophenol	0.090	0.010	0.1000	0	90.5	34	118			
2,4,6-Trichlorophenol	0.083	0.010	0.1000	0	82.6	34.1	109			
Cresols, Total	0.21	0.010	0.3000	0	71.6	30	136			
Surr: 2-Fluorophenol	0.099		0.2000		49.4	19	121			
Surr: Phenol-d5	0.082		0.2000		40.9	31.8	117			
Surr: 2,4,6-Tribromophenol	0.17		0.2000		85.1	31.3	139			
Surr: Nitrobenzene-d5	0.069		0.1000		69.2	48.2	128			
Surr: 2-Fluorobiphenyl	0.060		0.1000		60.3	58.4	114			
Surr: 4-Terphenyl-d14	0.059		0.1000		58.5	17.4	141			

Sample ID	Icsd-25863		SampType: LCSD		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS02		Batch ID: 25863		RunNo: 35016					
Prep Date:	6/15/2016		Analysis Date: 6/20/2016		SeqNo: 1082368		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.080	0.010	0.1000	0	79.6	37.6	110	16.6	20	R
3+4-Methylphenol	0.17	0.010	0.2000	0	83.8	30.5	149	12.7	20	
2,4-Dinitrotoluene	0.085	0.010	0.1000	0	84.7	24.9	93.7	21.2	20	
Hexachlorobenzene	0.094	0.010	0.1000	0	94.2	40	114	8.08	20	
Hexachlorobutadiene	0.059	0.010	0.1000	0	59.3	37.4	119	11.7	20	
Hexachloroethane	0.052	0.010	0.1000	0	52.2	33.8	105	12.6	20	
Nitrobenzene	0.080	0.010	0.1000	0	80.1	33.4	115	15.3	20	
Pentachlorophenol	0.086	0.010	0.1000	0	85.7	27.9	90.3	11.3	20	
Pyridine	0.056	0.010	0.1000	0	55.8	29.3	105	10.8	20	
2,4,5-Trichlorophenol	0.10	0.010	0.1000	0	103	34	118	12.9	20	
2,4,6-Trichlorophenol	0.097	0.010	0.1000	0	97.5	34.1	109	16.5	20	
Cresols, Total	0.25	0.010	0.3000	0	82.4	30	136	13.9	20	
Surr: 2-Fluorophenol	0.12		0.2000		58.0	19	121	0	20	
Surr: Phenol-d5	0.097		0.2000		48.6	31.8	117	0	20	
Surr: 2,4,6-Tribromophenol	0.19		0.2000		95.4	31.3	139	0	20	
Surr: Nitrobenzene-d5	0.076		0.1000		75.7	48.2	128	0	20	
Surr: 2-Fluorobiphenyl	0.070		0.1000		70.3	58.4	114	0	20	
Surr: 4-Terphenyl-d14	0.059		0.1000		59.2	17.4	141	0	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	MB-25712	SampType:	MBLK	TestCode:	MERCURY, TCLP					
Client ID:	PBW	Batch ID:	25712	RunNo:	34753					
Prep Date:	6/7/2016	Analysis Date:	6/8/2016	SeqNo:	1072037	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID	LCS-25712	SampType:	LCS	TestCode:	MERCURY, TCLP					
Client ID:	LCSW	Batch ID:	25712	RunNo:	34753					
Prep Date:	6/7/2016	Analysis Date:	6/8/2016	SeqNo:	1072038	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.020	0.005000	0	97.6	80	120			J

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606180

20-Jun-16

Client: Western Refining Southwest, Gallup

Project: ASO/Caustic Spill @ Baker Tank

Sample ID	MB-25711	SampType: MBLK			TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW	Batch ID: 25711			RunNo: 34755					
Prep Date:	6/7/2016	Analysis Date: 6/8/2016			SeqNo: 1072168		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	0.0013	100								J
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-25711		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 25711		RunNo: 34755					
Prep Date:	6/7/2016		Analysis Date: 6/8/2016		SeqNo: 1072170		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	109	80	120			J
Barium	0.50	100	0.5000	0	99.1	80	120			J
Cadmium	0.52	1.0	0.5000	0	105	80	120			J
Chromium	0.50	5.0	0.5000	0	99.0	80	120			J
Lead	0.51	5.0	0.5000	0	102	80	120			J
Selenium	0.56	1.0	0.5000	0	113	80	120			J
Silver	0.11	5.0	0.1000	0	107	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



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: 1606180

RcptNo: 1

Received by/date:

OT 04/03/16

Logged By: Ashley Gallegos

6/3/2016 2:17:00 PM

AG

Completed By: Ashley Gallegos

6/3/2016 3:11:39 PM

AG

Reviewed By:

AG 06/06/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



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

May 05, 2016

Beck Larsen

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

RE: ASO/CAUSTIC SPILL BAKER TANK SV29932L

OrderNo.: 1604C16

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/27/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1604C16**

Date Reported: 5/5/2016

CLIENT: Western Refining Southwest

Client Sample ID: ASO CAUSTIC SPILL KIT

Project: ASO/CAUSTIC SPILL BAKER TANK

Collection Date: 4/15/2016 8:41:00 AM

Lab ID: 1604C16-001

Matrix: SOIL

Received Date: 4/27/2016 3:22:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH	
Diesel Range Organics (DRO)	4400	340	960		mg/Kg	100	4/28/2016 1:15:41 PM	25053
Motor Oil Range Organics (MRO)	ND	4800	4800		mg/Kg	100	4/28/2016 1:15:41 PM	25053
Surr: DNOP	0	0	70-130	S	%Rec	100	4/28/2016 1:15:41 PM	25053
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	100	16	78		mg/Kg	20	4/28/2016 6:13:45 PM	25034
Surr: BFB	124	0	80-120	S	%Rec	20	4/28/2016 6:13:45 PM	25034
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.040	0.00057	0.033		mg/Kg	1	5/3/2016 10:30:34 AM	25104
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Arsenic	0.93	0.72	2.5	J	mg/Kg	1	5/2/2016 9:26:25 AM	25080
Barium	170	0.048	0.098		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Beryllium	0.43	0.0045	0.15		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Cadmium	ND	0.062	0.098		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Chromium	5.9	0.12	0.29		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Cobalt	2.5	0.037	0.29		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Lead	3.3	0.17	0.25		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Nickel	5.4	0.11	0.49		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Selenium	ND	1.1	2.5		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Silver	ND	0.031	0.25		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Vanadium	14	0.034	2.5		mg/Kg	1	5/2/2016 9:26:25 AM	25080
Zinc	20	0.56	2.5		mg/Kg	1	5/2/2016 9:26:25 AM	25080
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.16	0.20		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Toluene	0.21	0.023	0.39	J	mg/Kg	10	4/28/2016 1:45:17 PM	25015
Ethylbenzene	0.42	0.032	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Methyl tert-butyl ether (MTBE)	ND	0.12	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2,4-Trimethylbenzene	11	0.029	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,3,5-Trimethylbenzene	2.9	0.028	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2-Dichloroethane (EDC)	ND	0.10	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2-Dibromoethane (EDB)	ND	0.028	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Naphthalene	18	0.061	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1-Methylnaphthalene	30	0.087	1.6		mg/Kg	10	4/28/2016 1:45:17 PM	25015
2-Methylnaphthalene	68	0.84	16		mg/Kg	100	4/28/2016 2:41:54 PM	25015
Acetone	ND	0.51	5.9		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Bromobenzene	ND	0.032	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Bromodichloromethane	ND	0.023	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015

Refer to the QC Summary report and 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

Client Sample ID: ASO CAUSTIC SPILL KIT

Project: ASO/CAUSTIC SPILL BAKER TANK

Collection Date: 4/15/2016 8:41:00 AM

Lab ID: 1604C16-001

Matrix: SOIL

Received Date: 4/27/2016 3:22:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Bromoform	ND	0.048	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Bromomethane	ND	0.14	1.2		mg/Kg	10	4/28/2016 1:45:17 PM	25015
2-Butanone	ND	0.22	3.9		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Carbon disulfide	ND	0.13	3.9		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Carbon tetrachloride	ND	0.026	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Chlorobenzene	ND	0.032	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Chloroethane	ND	0.078	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Chloroform	ND	0.030	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Chloromethane	ND	0.035	1.2		mg/Kg	10	4/28/2016 1:45:17 PM	25015
2-Chlorotoluene	ND	0.029	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
4-Chlorotoluene	ND	0.035	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
cis-1,2-DCE	ND	0.023	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
cis-1,3-Dichloropropene	ND	0.036	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2-Dibromo-3-chloropropane	ND	0.12	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Dibromochloromethane	ND	0.035	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Dibromomethane	ND	0.034	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2-Dichlorobenzene	ND	0.034	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,3-Dichlorobenzene	ND	0.032	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,4-Dichlorobenzene	ND	0.049	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Dichlorodifluoromethane	ND	0.12	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1-Dichloroethane	ND	0.021	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1-Dichloroethene	ND	0.13	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2-Dichloropropane	ND	0.033	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,3-Dichloropropane	ND	0.045	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
2,2-Dichloropropane	ND	0.022	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1-Dichloropropene	ND	0.031	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Hexachlorobutadiene	ND	0.048	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
2-Hexanone	ND	0.21	3.9		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Isopropylbenzene	0.15	0.034	0.39	J	mg/Kg	10	4/28/2016 1:45:17 PM	25015
4-Isopropyltoluene	0.30	0.035	0.39	J	mg/Kg	10	4/28/2016 1:45:17 PM	25015
4-Methyl-2-pentanone	ND	0.11	3.9		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Methylene chloride	ND	0.11	1.2		mg/Kg	10	4/28/2016 1:45:17 PM	25015
n-Butylbenzene	1.4	0.035	1.2		mg/Kg	10	4/28/2016 1:45:17 PM	25015
n-Propylbenzene	0.72	0.030	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
sec-Butylbenzene	0.29	0.054	0.39	J	mg/Kg	10	4/28/2016 1:45:17 PM	25015
Styrene	ND	0.035	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
tert-Butylbenzene	ND	0.033	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1,1,2-Tetrachloroethane	ND	0.038	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1,2,2-Tetrachloroethane	ND	0.064	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1604C16**

Date Reported: 5/5/2016

CLIENT: Western Refining Southwest**Client Sample ID:** ASO CAUSTIC SPILL KIT**Project:** ASO/CAUSTIC SPILL BAKER TANK**Collection Date:** 4/15/2016 8:41:00 AM**Lab ID:** 1604C16-001**Matrix:** SOIL**Received Date:** 4/27/2016 3:22:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Tetrachloroethene (PCE)	ND	0.033	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
trans-1,2-DCE	ND	0.11	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
trans-1,3-Dichloropropene	ND	0.057	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2,3-Trichlorobenzene	ND	0.059	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2,4-Trichlorobenzene	ND	0.042	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1,1-Trichloroethane	ND	0.024	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,1,2-Trichloroethane	ND	0.046	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Trichloroethene (TCE)	ND	0.042	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Trichlorofluoromethane	ND	0.029	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,2,3-Trichloropropane	ND	0.068	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Vinyl chloride	ND	0.032	0.39		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Xylenes, Total	3.6	0.074	0.78		mg/Kg	10	4/28/2016 1:45:17 PM	25015
1,4-Dioxane	ND	1.8	3.9		mg/Kg	10	4/28/2016 1:45:17 PM	25015
Surr: Dibromofluoromethane	101		70-130		%Rec	10	4/28/2016 1:45:17 PM	25015
Surr: 1,2-Dichloroethane-d4	103		70-130		%Rec	10	4/28/2016 1:45:17 PM	25015
Surr: Toluene-d8	95.5		70-130		%Rec	10	4/28/2016 1:45:17 PM	25015
Surr: 4-Bromofluorobenzene	123		70-130		%Rec	10	4/28/2016 1:45:17 PM	25015
SM4500-H+B: PH							Analyst: JRR	
pH	8.39	0.100	1.68		pH Units	1	5/2/2016 3:02:00 PM	R33928

Refer to the QC Summary report and 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

Anatek Labs, Inc.

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

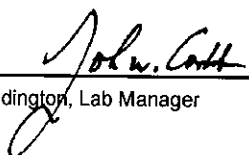
Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 160502011
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1604C16
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	160502011-001	Sampling Date	4/15/2016	Date/Time Received	4/29/2016 11:50 AM
Client Sample ID	1604C16-001C / ASO CAUSTIC SPILL KIT			Sampling Time	8:41 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.263	5/3/2016	MER	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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

Anatek Labs, Inc.

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

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

Batch #: 160502011

Project Name: 1604C16

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.489	mg/kg	0.5	97.8	90-110	5/2/2016	5/3/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160502011-001	Cyanide	ND	12.4	mg/kg	13.15	94.3	70-130	5/2/2016	5/3/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	11.9	mg/kg	13.15	90.5	4.1	0-25	5/2/2016	5/3/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	0.5	5/2/2016	5/3/2016

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

Comments:

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

Wednesday, May 04, 2016

Page 1 of 1

Anatek Labs, Inc.

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

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

Batch #: 160502011

Project Name: 1604C16

Analytical Results Report

Sample Number	160502011-001	Sampling Date	4/15/2016	Date/Time Received	4/29/2016 11:50 AM
Client Sample ID	1604C16-001C / ASO CAUSTIC SPILL KIT			Extraction Date	5/3/2016
Matrix	Soil			Sampling Time	8:41 AM
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dichlorobenzene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
1,3-Dichlorobenzene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
1,4-Dichlorobenzene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
1-Methylnaphthalene	29.7	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
2,4-Dimethylphenol	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
2,4-Dinitrophenol	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
2-Methylphenol	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
3+4-Methylphenol	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
4-Nitrophenol	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Acenaphthylene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Anthracene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Benzo[a]anthracene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Benzo[a]pyrene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Chrysene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Diethylphthalate	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Dimethylphthalate	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Di-n-butylphthalate	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Fluoranthene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Fluorene	2.10	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Naphthalene	14.8	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Phenanthrene	3.84	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Phenol	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Pyrene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:Cert0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169, ID:WA00169, WA:C585; MT:Cert0095; FL(NELAP): E871099

Thursday, May 05, 2016

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Anatek Labs, Inc.

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

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

Batch #: 160502011
Project Name: 1604C16

Analytical Results Report

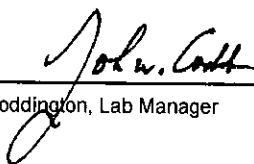
Sample Number	160502011-001	Sampling Date	4/15/2016	Date/Time Received	4/29/2016 11:50 AM
Client Sample ID	1604C16-001C / ASO CAUSTIC SPILL KIT	Extraction Date	5/3/2016		
Matrix	Soil	Sampling Time	8:41 AM		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Pyridine	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Benzenethiole	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Dibenz(a,h)acridine	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Indene	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
Quinoline	ND	mg/kg	0.25	5/4/2016	BMM	EPA 8270D	
%moisture	5.7	Percent		5/3/2016	MER	%moisture	

Surrogate Data

Sample Number	Surrogate Standard	Method	Percent Recovery	Control Limits
160502011-001	2,4,6-Tribromophenol	EPA 8270D	95.0	58-121
	2-Fluorobiphenyl	EPA 8270D	95.2	61-121
	2-Fluorophenol	EPA 8270D	84.0	53-114
	Nitrobenzene-d5	EPA 8270D	92.8	50-121
	Phenol-d5	EPA 8270D	85.0	54-120
	Terphenyl-d14	EPA 8270D	85.6	55-121

Authorized Signature


John Coddington, Lab Manager

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

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

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

Thursday, May 05, 2016

Page 2 of 2

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

Batch #: 160502011

Project Name: 1604C16

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Pyrene	0.94	mg/kg	1	94.0	68-146	5/3/2016	5/4/2016
Phenol	0.74	mg/kg	1	74.0	37-140	5/3/2016	5/4/2016
bis(2-Ethylhexyl)phthalate	0.97	mg/kg	1	97.0	49-172	5/3/2016	5/4/2016
4-Nitrophenol	0.55	mg/kg	1	55.0	10-115	5/3/2016	5/4/2016
1,4-Dichlorobenzene	0.72	mg/kg	1	72.0	44-115	5/3/2016	5/4/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,2-Dichlorobenzene	ND	mg/kg	0.05	5/3/2016	5/4/2016
1,3-Dichlorobenzene	ND	mg/kg	0.05	5/3/2016	5/4/2016
1,4-Dichlorobenzene	ND	mg/kg	0.05	5/3/2016	5/4/2016
1-Methylnaphthalene	ND	mg/kg	0.05	5/3/2016	5/4/2016
2,4-Dimethylphenol	ND	mg/kg	0.05	5/3/2016	5/4/2016
2,4-Dinitrophenol	ND	mg/kg	0.05	5/3/2016	5/4/2016
2-Methylphenol	ND	mg/kg	0.05	5/3/2016	5/4/2016
3+4-Methylphenol	ND	mg/kg	0.05	5/3/2016	5/4/2016
4-Nitrophenol	ND	mg/kg	0.05	5/3/2016	5/4/2016
Acenaphthylene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Anthracene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Benzo[a]anthracene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Benzo[a]pyrene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Benzo[b]fluoranthene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Benzo[k]fluoranthene	ND	mg/kg	0.05	5/3/2016	5/4/2016
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.05	5/3/2016	5/4/2016
Chrysene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Dibenz[a,h]anthracene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Diethylphthalate	ND	mg/kg	0.05	5/3/2016	5/4/2016
Dimethylphthalate	ND	mg/kg	0.05	5/3/2016	5/4/2016
Di-n-butylphthalate	ND	mg/kg	0.05	5/3/2016	5/4/2016
Fluoranthene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Fluorene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Naphthalene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Phenanthrene	ND	mg/kg	0.05	5/3/2016	5/4/2016

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALL ENVIRONMENTAL ANALYSIS LAB

Batch #: 160502011

Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109

Project Name: 1604C16

Attn: ANDY FREEMAN

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Phenol	ND	mg/kg	0.05	5/3/2016	5/4/2016
Pyrene	ND	mg/kg	0.05	5/3/2016	5/4/2016
Pyridine	ND	mg/kg	0.05	5/3/2016	5/4/2016

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

Comments:

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

Thursday, May 05, 2016

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604C16

05-May-16

Client: Western Refining Southwest

Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	MB-25053	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 25053			RunNo: 33843					
Prep Date:	4/28/2016	Analysis Date: 4/28/2016			SeqNo: 1042567		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		100	70	130			

Sample ID	LCS-25053		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 25053		RunNo: 33843					
Prep Date:	4/28/2016		Analysis Date: 4/28/2016		SeqNo: 1042741		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.3	65.8	136			
Surr: DNOP	4.8		5.000		95.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604C16

05-May-16

Client: Western Refining Southwest
Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	MB-25015		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 25015		RunNo: 33826					
Prep Date:	4/26/2016		Analysis Date: 4/27/2016		SeqNo: 1042318		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	950		1000		95.3	80	120			

Sample ID	LCS-25015		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 25015		RunNo: 33826					
Prep Date:	4/26/2016		Analysis Date: 4/27/2016		SeqNo: 1042319		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	80	120			

Sample ID	MB-25034		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 25034		RunNo: 33850					
Prep Date:	4/27/2016		Analysis Date: 4/28/2016		SeqNo: 1043122		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	960		1000		96.2	80	120			

Sample ID	LCS-25034		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 25034		RunNo: 33850					
Prep Date:	4/27/2016		Analysis Date: 4/28/2016		SeqNo: 1043125		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.5	80	120			
Surr: BFB	1000		1000		102	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604C16

05-May-16

Client: Western Refining Southwest
Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	mb-25015	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID:	25015	RunNo:	33872					
Prep Date:	4/26/2016	Analysis Date:	4/28/2016	SeqNo:	1043393	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	0.037	0.50								J
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#: 1604C16

05-May-16

Client: Western Refining Southwest

Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	mb-25015	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID:	25015	RunNo:	33872					
Prep Date:	4/26/2016	Analysis Date:	4/28/2016	SeqNo:	1043393	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	0.52		0.5000		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130			
Surr: Toluene-d8	0.48		0.5000		96.3	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			

Sample ID	lcs-25015	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	LCSS	Batch ID:	25015	RunNo:	33872					
Prep Date:	4/26/2016	Analysis Date:	4/28/2016	SeqNo:	1043396	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	109	70	130			
Toluene	0.99	0.050	1.000	0	99.1	70	130			
Chlorobenzene	0.96	0.050	1.000	0	96.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604C16

05-May-16

Client: Western Refining Southwest

Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	lcs-25015		SampType: LCS			TestCode: EPA Method 8260B: Volatiles				
Client ID:	LCSS		Batch ID: 25015			RunNo: 33872				
Prep Date:	4/26/2016		Analysis Date: 4/28/2016			SeqNo: 1043396		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	106	70	130			
Trichloroethene (TCE)	1.0	0.050	1.000	0	103	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130			
Surr: Toluene-d8	0.47		0.5000		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604C16

05-May-16

Client: Western Refining Southwest
Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	MB-25104	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	25104	RunNo:	33944					
Prep Date:	5/2/2016	Analysis Date:	5/3/2016	SeqNo:	1045849	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-25104	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	25104	RunNo:	33944					
Prep Date:	5/2/2016	Analysis Date:	5/3/2016	SeqNo:	1045850	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	105	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604C16

05-May-16

Client: Western Refining Southwest
Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	MB-25080		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	25080		RunNo:	33909			
Prep Date:	4/29/2016		Analysis Date:	5/2/2016		SeqNo:	1044617		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-25080		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	25080		RunNo:	33909			
Prep Date:	4/29/2016		Analysis Date:	5/2/2016		SeqNo:	1044618		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	97.8	80	120			
Arsenic	26	2.5	25.00	0	106	80	120			
Barium	26	0.10	25.00	0	103	80	120			
Beryllium	27	0.15	25.00	0	107	80	120			
Cadmium	26	0.10	25.00	0	103	80	120			
Chromium	25	0.30	25.00	0	101	80	120			
Cobalt	25	0.30	25.00	0	101	80	120			
Lead	25	0.25	25.00	0	101	80	120			
Nickel	25	0.50	25.00	0	101	80	120			
Selenium	27	2.5	25.00	0	109	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			
Vanadium	26	2.5	25.00	0	104	80	120			
Zinc	26	2.5	25.00	0	103	80	120			

Sample ID	1604C16-001BMS		SampType:	MS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	ASO CAUSTIC SPIL		Batch ID:	25080		RunNo:	33909			
Prep Date:	4/29/2016		Analysis Date:	5/2/2016		SeqNo:	1044622		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	8.0	2.5	24.75	0	32.5	75	125			S
Arsenic	26	2.5	24.75	0.9295	99.9	75	125			

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#: 1604C16

05-May-16

Client: Western Refining Southwest
Project: ASO/CAUSTIC SPILL BAKER TANK SV2993

Sample ID	1604C16-001BMS		SampType: MS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	ASO CAUSTIC SPIL		Batch ID: 25080		RunNo: 33909					
Prep Date:	4/29/2016		Analysis Date: 5/2/2016		SeqNo: 1044622		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	24	0.15	24.75	0.4309	94.9	75	125			
Cadmium	23	0.099	24.75	0	93.9	75	125			
Chromium	29	0.30	24.75	5.907	94.7	75	125			
Cobalt	24	0.30	24.75	2.477	86.8	75	125			
Lead	25	0.25	24.75	3.268	87.5	75	125			
Nickel	28	0.49	24.75	5.426	90.2	75	125			
Selenium	22	2.5	24.75	0	87.4	75	125			
Silver	4.5	0.25	4.950	0	91.9	75	125			
Vanadium	38	2.5	24.75	13.58	99.1	75	125			
Zinc	59	2.5	24.75	20.25	157	75	125			S

Sample ID	1604C16-001BMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	ASO CAUSTIC SPIL		Batch ID: 25080		RunNo: 33909					
Prep Date:	4/29/2016		Analysis Date: 5/2/2016		SeqNo: 1044623		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	9.4	2.5	24.66	0	38.0	75	125	15.3	20	S
Arsenic	26	2.5	24.66	0.9295	103	75	125	2.68	20	
Barium	240	0.099	24.66	171.6	267	75	125	11.2	20	S
Beryllium	25	0.15	24.66	0.4309	98.4	75	125	3.23	20	
Cadmium	24	0.099	24.66	0	97.9	75	125	3.80	20	
Chromium	30	0.30	24.66	5.907	97.3	75	125	1.91	20	
Cobalt	25	0.30	24.66	2.477	91.0	75	125	3.98	20	
Lead	25	0.25	24.66	3.268	87.8	75	125	0.00695	20	
Nickel	28	0.49	24.66	5.426	90.9	75	125	0.358	20	
Selenium	23	2.5	24.66	0	93.5	75	125	6.31	20	
Silver	4.7	0.25	4.932	0	95.8	75	125	3.86	20	
Vanadium	38	2.5	24.66	13.58	97.5	75	125	1.29	20	
Zinc	40	2.5	24.66	20.25	81.4	75	125	37.9	20	R

Sample ID	1604C16-001BPS		SampType: PS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	ASO CAUSTIC SPIL		Batch ID: 25080		RunNo: 33909					
Prep Date:			Analysis Date: 5/2/2016		SeqNo: 1044624		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	21	2.5	24.57	0	85.2	80	120			
Barium	190	0.098	24.57	171.6	83.5	80	120			
Zinc	41	2.5	24.57	20.25	83.0	80	120			

Qualifiers:

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



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: **1604C16**

RcptNo: 1

Received by/date:

AK

04/27/16

Logged By: **Lindsay Mangin**

4/27/2016 3:22:00 PM

Lindsay Mangin

Completed By: **Lindsay Mangin**

4/28/2016 8:58:49 AM

Lindsay Mangin

Reviewed By:

[Signature]

04/28/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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



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

October 13, 2016

Ed Riege

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: ASO SPILL BAKER TANK

OrderNo.: 1609A07

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/16/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-1 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:15:00 PM

Lab ID: 1609A07-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	ND	1.9	10		mg/Kg	1	9/28/2016 4:21:10 AM	27706
Motor Oil Range Organics (MRO)	ND	50	50		mg/Kg	1	9/28/2016 4:21:10 AM	27706
Surr: DNOP	98.3	0	70-130		%Rec	1	9/28/2016 4:21:10 AM	27706
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.0028	0.00056	0.033	J	mg/Kg	1	9/22/2016 1:58:17 PM	27628
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.0	2.5		mg/Kg	1	9/28/2016 4:51:17 PM	27620
Arsenic	1.7	0.88	2.5	J	mg/Kg	1	9/23/2016 10:33:12 AM	27620
Barium	220	0.070	0.099		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Beryllium	0.84	0.034	0.15		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Cadmium	ND	0.063	0.099		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Chromium	10	0.094	0.30		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Cobalt	3.9	0.11	0.30		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Lead	2.6	0.17	0.25		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Nickel	7.3	0.15	0.50		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Selenium	ND	1.8	2.5		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Silver	ND	0.062	0.25		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Vanadium	17	0.17	2.5		mg/Kg	1	9/23/2016 10:33:12 AM	27620
Zinc	14	0.34	2.5		mg/Kg	1	9/23/2016 10:33:12 AM	27620
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	0.085	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Acenaphthylene	ND	0.080	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Aniline	ND	0.093	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Anthracene	ND	0.066	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Azobenzene	ND	0.12	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benz(a)anthracene	ND	0.085	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benzo(a)pyrene	ND	0.075	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benzo(b)fluoranthene	ND	0.089	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benzo(g,h,i)perylene	ND	0.087	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benzo(k)fluoranthene	ND	0.087	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benzoic acid	ND	0.082	0.49		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Benzyl alcohol	ND	0.077	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Bis(2-chloroethoxy)methane	ND	0.11	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Bis(2-chloroethyl)ether	ND	0.073	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Bis(2-chloroisopropyl)ether	ND	0.088	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Bis(2-ethylhexyl)phthalate	0.13	0.080	0.49	J	mg/Kg	1	9/29/2016 12:20:21 PM	27700
4-Bromophenyl phenyl ether	ND	0.094	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Butyl benzyl phthalate	ND	0.087	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-1 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:15:00 PM

Lab ID: 1609A07-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Carbazole	ND	0.067	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
4-Chloro-3-methylphenol	ND	0.12	0.49		mg/Kg	1	9/29/2016 12:20:21 PM	27700
4-Chloroaniline	ND	0.11	0.49		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2-Chloronaphthalene	ND	0.078	0.25		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2-Chlorophenol	ND	0.078	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
4-Chlorophenyl phenyl ether	ND	0.11	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Chrysene	ND	0.084	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Di-n-butyl phthalate	0.10	0.074	0.40	J	mg/Kg	1	9/29/2016 12:20:21 PM	27700
Di-n-octyl phthalate	ND	0.084	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Dibenz(a,h)anthracene	ND	0.080	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Dibenzofuran	ND	0.099	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
1,2-Dichlorobenzene	ND	0.076	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
1,3-Dichlorobenzene	ND	0.076	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
1,4-Dichlorobenzene	ND	0.084	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
3,3'-Dichlorobenzidine	ND	0.073	0.25		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Diethyl phthalate	0.12	0.10	0.20	J	mg/Kg	1	9/29/2016 12:20:21 PM	27700
Dimethyl phthalate	ND	0.097	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,4-Dichlorophenol	ND	0.092	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,4-Dimethylphenol	ND	0.11	0.30		mg/Kg	1	9/29/2016 12:20:21 PM	27700
4,6-Dinitro-2-methylphenol	ND	0.060	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,4-Dinitrophenol	ND	0.066	0.49		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,4-Dinitrotoluene	ND	0.088	0.49		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,6-Dinitrotoluene	ND	0.10	0.49		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Fluoranthene	ND	0.057	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Fluorene	ND	0.090	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Hexachlorobenzene	ND	0.078	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Hexachlorobutadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Hexachlorocyclopentadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Hexachloroethane	ND	0.085	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Indeno(1,2,3-cd)pyrene	ND	0.077	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Isophorone	ND	0.11	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
1-Methylnaphthalene	ND	0.099	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2-Methylnaphthalene	ND	0.12	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2-Methylphenol	ND	0.083	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
3+4-Methylphenol	ND	0.072	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
N-Nitrosodi-n-propylamine	ND	0.095	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
N-Nitrosodiphenylamine	ND	0.096	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Naphthalene	ND	0.095	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2-Nitroaniline	ND	0.11	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-1 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:15:00 PM

Lab ID: 1609A07-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
3-Nitroaniline	ND	0.087	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
4-Nitroaniline	ND	0.070	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Nitrobenzene	ND	0.10	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2-Nitrophenol	ND	0.098	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
4-Nitrophenol	ND	0.075	0.25		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Pentachlorophenol	ND	0.063	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Phenanthrene	ND	0.067	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Phenol	ND	0.074	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Pyrene	ND	0.075	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Pyridine	ND	0.078	0.40		mg/Kg	1	9/29/2016 12:20:21 PM	27700
1,2,4-Trichlorobenzene	ND	0.11	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,4,5-Trichlorophenol	ND	0.099	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
2,4,6-Trichlorophenol	ND	0.082	0.20		mg/Kg	1	9/29/2016 12:20:21 PM	27700
Surr: 2-Fluorophenol	78.8	0	35-97.9		%Rec	1	9/29/2016 12:20:21 PM	27700
Surr: Phenol-d5	80.3	0	37.3-105		%Rec	1	9/29/2016 12:20:21 PM	27700
Surr: 2,4,6-Tribromophenol	81.6	0	35.6-118		%Rec	1	9/29/2016 12:20:21 PM	27700
Surr: Nitrobenzene-d5	71.6		41.2-107		%Rec	1	9/29/2016 12:20:21 PM	27700
Surr: 2-Fluorobiphenyl	74.4		41.9-119		%Rec	1	9/29/2016 12:20:21 PM	27700
Surr: 4-Terphenyl-d14	59.6		15-132		%Rec	1	9/29/2016 12:20:21 PM	27700
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Toluene	0.966	0.188	1.56	J	µg/Kg	1	9/21/2016 11:34:00 AM	27629
Ethylbenzene	0.327	0.209	1.56	J	µg/Kg	1	9/21/2016 11:34:00 AM	27629
Methyl tert-butyl ether (MTBE)	ND	0.262	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2,4-Trimethylbenzene	0.335	0.264	1.56	J	µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,3,5-Trimethylbenzene	0.273	0.257	1.56	J	µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2-Dichloroethane (EDC)	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2-Dibromoethane (EDB)	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Naphthalene	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1-Methylnaphthalene	ND	0.177	3.12		µg/Kg	1	9/21/2016 11:34:00 AM	27629
2-Methylnaphthalene	ND	0.410	3.12		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Acetone	8.10	0.461	7.79		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Bromobenzene	ND	0.159	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Bromodichloromethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Bromoform	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Bromomethane	ND	0.281	2.34		µg/Kg	1	9/21/2016 11:34:00 AM	27629
2-Butanone	ND	0.562	7.79		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Carbon disulfide	ND	0.576	7.79		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Carbon tetrachloride	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629

Refer to the QC Summary report and 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

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-1 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:15:00 PM

Lab ID: 1609A07-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Chlorobenzene	ND	0.179	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Chloroethane	ND	0.288	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Chloroform	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Chloromethane	ND	0.395	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
2-Chlorotoluene	ND	0.265	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
4-Chlorotoluene	ND	0.259	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
cis-1,2-DCE	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
cis-1,3-Dichloropropene	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2-Dibromo-3-chloropropane	ND	0.166	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Dibromochloromethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Dibromomethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2-Dichlorobenzene	ND	0.227	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,3-Dichlorobenzene	ND	0.288	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,4-Dichlorobenzene	ND	0.292	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Dichlorodifluoromethane	ND	0.910	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,1-Dichloroethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,1-Dichloroethene	ND	0.255	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2-Dichloropropane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,3-Dichloropropane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
2,2-Dichloropropane	ND	0.197	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,1-Dichloropropene	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Hexachlorobutadiene	ND	0.355	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
2-Hexanone	ND	0.388	7.79		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Isopropylbenzene	0.210	0.196	1.56	J	µg/Kg	1	9/21/2016 11:34:00 AM	27629
4-Isopropyltoluene	ND	0.292	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
4-Methyl-2-pentanone	ND	3.12	7.79		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Methylene chloride	ND	1.56	2.34		µg/Kg	1	9/21/2016 11:34:00 AM	27629
n-Butylbenzene	ND	0.380	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
n-Propylbenzene	ND	0.279	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
sec-Butylbenzene	ND	0.277	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Styrene	ND	0.199	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
tert-Butylbenzene	ND	0.228	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,1,1,2-Tetrachloroethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,1,2,2-Tetrachloroethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Tetrachloroethene (PCE)	ND	0.205	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
trans-1,2-DCE	ND	0.157	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
trans-1,3-Dichloropropene	ND	0.189	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2,3-Trichlorobenzene	ND	0.377	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2,4-Trichlorobenzene	ND	0.473	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-1 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:15:00 PM

Lab ID: 1609A07-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
1,1,1-Trichloroethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,1,2-Trichloroethane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Trichloroethene (TCE)	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Trichlorofluoromethane	ND	0.196	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
1,2,3-Trichloropropane	ND	1.56	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Vinyl chloride	ND	0.410	1.56		µg/Kg	1	9/21/2016 11:34:00 AM	27629
Xylenes, Total	1.11	0.621	1.56	J	µg/Kg	1	9/21/2016 11:34:00 AM	27629
Surr: 1,2-Dichloroethane-d4	120	0	70-130		%Rec	1	9/21/2016 11:34:00 AM	27629
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	9/21/2016 11:34:00 AM	27629
Surr: Dibromofluoromethane	108	0	70-130		%Rec	1	9/21/2016 11:34:00 AM	27629
Surr: Toluene-d8	97.4	0	70-130		%Rec	1	9/21/2016 11:34:00 AM	27629
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG	
Gasoline Range Organics (GRO)	0.50	0.42	2.8	J	mg/Kg	1	9/20/2016 5:17:44 AM	W37308
Surr: BFB	103	0	70-130		%Rec	1	9/20/2016 5:17:44 AM	W37308

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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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-2 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:50:00 PM

Lab ID: 1609A07-002

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	12	1.8	9.8		mg/Kg	1	9/28/2016 4:43:43 AM	27706
Motor Oil Range Organics (MRO)	ND	49	49		mg/Kg	1	9/28/2016 4:43:43 AM	27706
Surr: DNOP	103	0	70-130		%Rec	1	9/28/2016 4:43:43 AM	27706
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.0042	0.00056	0.033	J	mg/Kg	1	9/22/2016 2:00:03 PM	27628
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	0.99	2.5		mg/Kg	1	9/28/2016 4:52:47 PM	27620
Arsenic	2.3	0.87	2.5	J	mg/Kg	1	9/23/2016 10:35:02 AM	27620
Barium	800	0.35	0.49		mg/Kg	5	9/28/2016 4:54:21 PM	27620
Beryllium	0.65	0.034	0.15		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Cadmium	ND	0.062	0.098		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Chromium	8.5	0.093	0.29		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Cobalt	3.4	0.11	0.29		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Lead	2.0	0.17	0.25		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Nickel	5.9	0.15	0.49		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Selenium	ND	1.8	2.5		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Silver	ND	0.061	0.25		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Vanadium	19	0.17	2.5		mg/Kg	1	9/23/2016 10:35:02 AM	27620
Zinc	11	0.34	2.5		mg/Kg	1	9/23/2016 10:35:02 AM	27620
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	0.085	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Acenaphthylene	ND	0.081	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Aniline	ND	0.094	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Anthracene	ND	0.066	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Azobenzene	ND	0.12	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benz(a)anthracene	ND	0.086	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benzo(a)pyrene	ND	0.075	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benzo(b)fluoranthene	ND	0.090	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benzo(g,h,i)perylene	ND	0.088	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benzo(k)fluoranthene	ND	0.088	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benzoic acid	ND	0.083	0.50		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Benzyl alcohol	ND	0.078	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Bis(2-chloroethoxy)methane	ND	0.11	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Bis(2-chloroethyl)ether	ND	0.073	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Bis(2-chloroisopropyl)ether	ND	0.089	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Bis(2-ethylhexyl)phthalate	0.16	0.081	0.50	J	mg/Kg	1	9/29/2016 1:44:10 PM	27700
4-Bromophenyl phenyl ether	ND	0.095	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Butyl benzyl phthalate	ND	0.088	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700

Refer to the QC Summary report and 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: ASO-2 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:50:00 PM

Lab ID: 1609A07-002

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Carbazole	ND	0.067	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
4-Chloro-3-methylphenol	ND	0.12	0.50		mg/Kg	1	9/29/2016 1:44:10 PM	27700
4-Chloroaniline	ND	0.11	0.50		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2-Chloronaphthalene	ND	0.078	0.25		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2-Chlorophenol	ND	0.079	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
4-Chlorophenyl phenyl ether	ND	0.11	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Chrysene	ND	0.085	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Di-n-butyl phthalate	0.11	0.075	0.40	J	mg/Kg	1	9/29/2016 1:44:10 PM	27700
Di-n-octyl phthalate	ND	0.085	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Dibenz(a,h)anthracene	ND	0.081	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Dibenzofuran	ND	0.10	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
1,2-Dichlorobenzene	ND	0.076	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
1,3-Dichlorobenzene	ND	0.077	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
1,4-Dichlorobenzene	ND	0.084	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
3,3'-Dichlorobenzidine	ND	0.073	0.25		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Diethyl phthalate	0.13	0.10	0.20	J	mg/Kg	1	9/29/2016 1:44:10 PM	27700
Dimethyl phthalate	ND	0.097	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,4-Dichlorophenol	ND	0.093	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,4-Dimethylphenol	ND	0.11	0.30		mg/Kg	1	9/29/2016 1:44:10 PM	27700
4,6-Dinitro-2-methylphenol	ND	0.060	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,4-Dinitrophenol	ND	0.066	0.50		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,4-Dinitrotoluene	ND	0.089	0.50		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,6-Dinitrotoluene	ND	0.11	0.50		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Fluoranthene	ND	0.057	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Fluorene	ND	0.091	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Hexachlorobenzene	ND	0.079	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Hexachlorobutadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Hexachlorocyclopentadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Hexachloroethane	ND	0.086	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Indeno(1,2,3-cd)pyrene	ND	0.078	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Isophorone	ND	0.11	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
1-Methylnaphthalene	ND	0.10	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2-Methylnaphthalene	ND	0.12	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2-Methylphenol	ND	0.083	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
3+4-Methylphenol	ND	0.072	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
N-Nitrosodi-n-propylamine	ND	0.096	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
N-Nitrosodiphenylamine	ND	0.097	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Naphthalene	ND	0.096	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2-Nitroaniline	ND	0.11	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-2 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:50:00 PM

Lab ID: 1609A07-002

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
3-Nitroaniline	ND	0.088	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
4-Nitroaniline	ND	0.070	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Nitrobenzene	ND	0.10	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2-Nitrophenol	ND	0.099	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
4-Nitrophenol	ND	0.076	0.25		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Pentachlorophenol	ND	0.064	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Phenanthrene	ND	0.068	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Phenol	ND	0.075	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Pyrene	ND	0.075	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Pyridine	ND	0.079	0.40		mg/Kg	1	9/29/2016 1:44:10 PM	27700
1,2,4-Trichlorobenzene	ND	0.11	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,4,5-Trichlorophenol	ND	0.10	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
2,4,6-Trichlorophenol	ND	0.083	0.20		mg/Kg	1	9/29/2016 1:44:10 PM	27700
Surr: 2-Fluorophenol	68.9	0	35-97.9		%Rec	1	9/29/2016 1:44:10 PM	27700
Surr: Phenol-d5	78.8	0	37.3-105		%Rec	1	9/29/2016 1:44:10 PM	27700
Surr: 2,4,6-Tribromophenol	82.8	0	35.6-118		%Rec	1	9/29/2016 1:44:10 PM	27700
Surr: Nitrobenzene-d5	63.0		41.2-107		%Rec	1	9/29/2016 1:44:10 PM	27700
Surr: 2-Fluorobiphenyl	75.9		41.9-119		%Rec	1	9/29/2016 1:44:10 PM	27700
Surr: 4-Terphenyl-d14	59.8		15-132		%Rec	1	9/29/2016 1:44:10 PM	27700
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	ND	0.013	0.017		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Toluene	ND	0.0020	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Ethylbenzene	ND	0.0027	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Methyl tert-butyl ether (MTBE)	ND	0.011	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2,4-Trimethylbenzene	0.0059	0.0025	0.034	J	mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,3,5-Trimethylbenzene	0.0073	0.0024	0.034	J	mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2-Dichloroethane (EDC)	ND	0.0087	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2-Dibromoethane (EDB)	ND	0.0024	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Naphthalene	ND	0.0052	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1-Methylnaphthalene	0.11	0.0075	0.13	J	mg/Kg	1	9/20/2016 6:44:12 AM	S37308
2-Methylnaphthalene	0.059	0.0072	0.13	J	mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Acetone	ND	0.043	0.50		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Bromobenzene	ND	0.0027	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Bromodichloromethane	ND	0.0020	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Bromoform	ND	0.0041	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Bromomethane	ND	0.012	0.10		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
2-Butanone	ND	0.019	0.34		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Carbon disulfide	ND	0.011	0.34		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Carbon tetrachloride	ND	0.0022	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308

Refer to the QC Summary report and 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: ASO-2 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:50:00 PM

Lab ID: 1609A07-002

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Chlorobenzene	ND	0.0027	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Chloroethane	ND	0.0067	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Chloroform	ND	0.0025	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Chloromethane	ND	0.0030	0.10		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
2-Chlorotoluene	ND	0.0025	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
4-Chlorotoluene	ND	0.0030	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
cis-1,2-DCE	ND	0.0019	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
cis-1,3-Dichloropropene	ND	0.0031	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2-Dibromo-3-chloropropane	ND	0.010	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Dibromochloromethane	ND	0.0030	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Dibromomethane	ND	0.0029	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2-Dichlorobenzene	ND	0.0029	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,3-Dichlorobenzene	ND	0.0027	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,4-Dichlorobenzene	ND	0.0042	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Dichlorodifluoromethane	ND	0.010	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,1-Dichloroethane	ND	0.0018	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,1-Dichloroethene	ND	0.011	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2-Dichloropropane	ND	0.0028	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,3-Dichloropropane	ND	0.0038	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
2,2-Dichloropropane	ND	0.0019	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,1-Dichloropropene	ND	0.0027	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Hexachlorobutadiene	ND	0.0041	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
2-Hexanone	ND	0.018	0.34		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Isopropylbenzene	ND	0.0029	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
4-Isopropyltoluene	ND	0.0030	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
4-Methyl-2-pentanone	ND	0.0098	0.34		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Methylene chloride	ND	0.0097	0.10		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
n-Butylbenzene	ND	0.0030	0.10		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
n-Propylbenzene	ND	0.0026	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
sec-Butylbenzene	ND	0.0046	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Styrene	ND	0.0030	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
tert-Butylbenzene	ND	0.0028	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,1,1,2-Tetrachloroethane	ND	0.0032	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,1,2,2-Tetrachloroethane	ND	0.0054	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Tetrachloroethene (PCE)	ND	0.0028	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
trans-1,2-DCE	ND	0.0094	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
trans-1,3-Dichloropropene	ND	0.0049	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2,3-Trichlorobenzene	ND	0.0050	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2,4-Trichlorobenzene	ND	0.0036	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-2 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 12:50:00 PM

Lab ID: 1609A07-002

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,1,1-Trichloroethane	ND	0.0020	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,1,2-Trichloroethane	ND	0.0040	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Trichloroethene (TCE)	ND	0.0036	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Trichlorofluoromethane	ND	0.0025	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
1,2,3-Trichloropropane	ND	0.0058	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Vinyl chloride	ND	0.0027	0.034		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Xylenes, Total	ND	0.0063	0.067		mg/Kg	1	9/20/2016 6:44:12 AM	S37308
Surr: Dibromofluoromethane	111		70-130		%Rec	1	9/20/2016 6:44:12 AM	S37308
Surr: 1,2-Dichloroethane-d4	101		70-130		%Rec	1	9/20/2016 6:44:12 AM	S37308
Surr: Toluene-d8	99.1		70-130		%Rec	1	9/20/2016 6:44:12 AM	S37308
Surr: 4-Bromofluorobenzene	87.4		70-130		%Rec	1	9/20/2016 6:44:12 AM	S37308
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG	
Gasoline Range Organics (GRO)	0.92	0.50	3.4	J	mg/Kg	1	9/20/2016 6:44:12 AM	W37308
Surr: BFB	109	0	70-130		%Rec	1	9/20/2016 6:44:12 AM	W37308

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-3 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:20:00 PM

Lab ID: 1609A07-003

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	6.5	1.8	9.9	J	mg/Kg	1	9/28/2016 5:06:12 AM	27706
Motor Oil Range Organics (MRO)	ND	50	50		mg/Kg	1	9/28/2016 5:06:12 AM	27706
Surr: DNOP	103	0	70-130		%Rec	1	9/28/2016 5:06:12 AM	27706
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.0026	0.00057	0.033	J	mg/Kg	1	9/22/2016 2:01:53 PM	27628
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	0.97	2.4		mg/Kg	1	9/28/2016 11:56:15 PM	27620
Arsenic	3.2	0.85	2.4		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Barium	760	0.34	0.48		mg/Kg	5	9/28/2016 4:57:23 PM	27620
Beryllium	0.70	0.033	0.14		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Cadmium	ND	0.061	0.096		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Chromium	8.1	0.091	0.29		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Cobalt	3.5	0.11	0.29		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Lead	2.0	0.17	0.24		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Nickel	6.0	0.15	0.48		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Selenium	ND	1.7	2.4		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Silver	ND	0.060	0.24		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Vanadium	18	0.17	2.4		mg/Kg	1	9/23/2016 10:36:58 AM	27620
Zinc	11	0.33	2.4		mg/Kg	1	9/23/2016 10:36:58 AM	27620
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	0.084	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Acenaphthylene	ND	0.079	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Aniline	ND	0.092	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Anthracene	ND	0.065	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Azobenzene	ND	0.12	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benz(a)anthracene	ND	0.084	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benzo(a)pyrene	ND	0.074	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benzo(b)fluoranthene	ND	0.088	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benzo(g,h,i)perylene	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benzo(k)fluoranthene	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benzoic acid	ND	0.081	0.49		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Benzyl alcohol	ND	0.076	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Bis(2-chloroethoxy)methane	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Bis(2-chloroethyl)ether	ND	0.072	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Bis(2-chloroisopropyl)ether	ND	0.087	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Bis(2-ethylhexyl)phthalate	0.11	0.080	0.49	J	mg/Kg	1	9/29/2016 2:12:05 PM	27700
4-Bromophenyl phenyl ether	ND	0.093	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Butyl benzyl phthalate	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700

Refer to the QC Summary report and 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: ASO-3 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:20:00 PM

Lab ID: 1609A07-003

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Carbazole	ND	0.066	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
4-Chloro-3-methylphenol	ND	0.12	0.49		mg/Kg	1	9/29/2016 2:12:05 PM	27700
4-Chloroaniline	ND	0.11	0.49		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2-Chloronaphthalene	ND	0.077	0.24		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2-Chlorophenol	ND	0.077	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
4-Chlorophenyl phenyl ether	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Chrysene	ND	0.083	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Di-n-butyl phthalate	0.085	0.073	0.39	J	mg/Kg	1	9/29/2016 2:12:05 PM	27700
Di-n-octyl phthalate	ND	0.083	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Dibenz(a,h)anthracene	ND	0.079	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Dibenzofuran	ND	0.098	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
1,2-Dichlorobenzene	ND	0.075	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
1,3-Dichlorobenzene	ND	0.075	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
1,4-Dichlorobenzene	ND	0.083	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
3,3'-Dichlorobenzidine	ND	0.072	0.24		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Diethyl phthalate	0.13	0.099	0.20	J	mg/Kg	1	9/29/2016 2:12:05 PM	27700
Dimethyl phthalate	ND	0.095	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,4-Dichlorophenol	ND	0.091	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,4-Dimethylphenol	ND	0.11	0.29		mg/Kg	1	9/29/2016 2:12:05 PM	27700
4,6-Dinitro-2-methylphenol	ND	0.059	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,4-Dinitrophenol	ND	0.065	0.49		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,4-Dinitrotoluene	ND	0.087	0.49		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,6-Dinitrotoluene	ND	0.10	0.49		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Fluoranthene	ND	0.056	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Fluorene	ND	0.089	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Hexachlorobenzene	ND	0.077	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Hexachlorobutadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Hexachlorocyclopentadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Hexachloroethane	ND	0.084	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Indeno(1,2,3-cd)pyrene	ND	0.076	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Isophorone	ND	0.11	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
1-Methylnaphthalene	ND	0.098	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2-Methylnaphthalene	ND	0.12	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2-Methylphenol	ND	0.082	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
3+4-Methylphenol	ND	0.071	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
N-Nitrosodi-n-propylamine	ND	0.094	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
N-Nitrosodiphenylamine	ND	0.095	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Naphthalene	ND	0.094	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2-Nitroaniline	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-3 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:20:00 PM

Lab ID: 1609A07-003

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
3-Nitroaniline	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
4-Nitroaniline	ND	0.069	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Nitrobenzene	ND	0.10	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2-Nitrophenol	ND	0.097	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
4-Nitrophenol	ND	0.074	0.24		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Pentachlorophenol	ND	0.063	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Phenanthrene	ND	0.066	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Phenol	ND	0.074	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Pyrene	ND	0.074	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Pyridine	ND	0.077	0.39		mg/Kg	1	9/29/2016 2:12:05 PM	27700
1,2,4-Trichlorobenzene	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,4,5-Trichlorophenol	ND	0.098	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
2,4,6-Trichlorophenol	ND	0.081	0.20		mg/Kg	1	9/29/2016 2:12:05 PM	27700
Surr: 2-Fluorophenol	68.9	0	35-97.9		%Rec	1	9/29/2016 2:12:05 PM	27700
Surr: Phenol-d5	76.1	0	37.3-105		%Rec	1	9/29/2016 2:12:05 PM	27700
Surr: 2,4,6-Tribromophenol	71.7	0	35.6-118		%Rec	1	9/29/2016 2:12:05 PM	27700
Surr: Nitrobenzene-d5	64.8		41.2-107		%Rec	1	9/29/2016 2:12:05 PM	27700
Surr: 2-Fluorobiphenyl	63.4		41.9-119		%Rec	1	9/29/2016 2:12:05 PM	27700
Surr: 4-Terphenyl-d14	53.6		15-132		%Rec	1	9/29/2016 2:12:05 PM	27700
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Toluene	0.417	0.219	1.81	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
Ethylbenzene	0.254	0.243	1.81	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
Methyl tert-butyl ether (MTBE)	ND	0.304	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2,4-Trimethylbenzene	0.344	0.307	1.81	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,3,5-Trimethylbenzene	ND	0.299	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2-Dichloroethane (EDC)	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2-Dibromoethane (EDB)	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Naphthalene	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1-Methylnaphthalene	0.715	0.206	3.62	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
2-Methylnaphthalene	1.01	0.477	3.62	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
Acetone	5.78	0.536	9.05	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
Bromobenzene	ND	0.184	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Bromodichloromethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Bromoform	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Bromomethane	ND	0.326	2.72		µg/Kg	1	9/21/2016 12:00:00 PM	27629
2-Butanone	ND	0.653	9.05		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Carbon disulfide	ND	0.670	9.05		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Carbon tetrachloride	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629

Refer to the QC Summary report and 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: ASO-3 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:20:00 PM

Lab ID: 1609A07-003

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Chlorobenzene	ND	0.208	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Chloroethane	ND	0.334	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Chloroform	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Chloromethane	ND	0.459	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
2-Chlorotoluene	ND	0.308	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
4-Chlorotoluene	ND	0.301	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
cis-1,2-DCE	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
cis-1,3-Dichloropropene	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2-Dibromo-3-chloropropane	ND	0.193	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Dibromochloromethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Dibromomethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2-Dichlorobenzene	ND	0.264	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,3-Dichlorobenzene	ND	0.334	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,4-Dichlorobenzene	ND	0.339	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Dichlorodifluoromethane	ND	1.06	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,1-Dichloroethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,1-Dichloroethene	ND	0.297	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2-Dichloropropane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,3-Dichloropropane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
2,2-Dichloropropane	ND	0.229	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,1-Dichloropropene	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Hexachlorobutadiene	ND	0.413	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
2-Hexanone	ND	0.451	9.05		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Isopropylbenzene	ND	0.228	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
4-Isopropyltoluene	ND	0.340	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
4-Methyl-2-pentanone	ND	3.62	9.05		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Methylene chloride	ND	1.81	2.72		µg/Kg	1	9/21/2016 12:00:00 PM	27629
n-Butylbenzene	ND	0.441	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
n-Propylbenzene	ND	0.324	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
sec-Butylbenzene	ND	0.322	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Styrene	ND	0.231	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
tert-Butylbenzene	ND	0.265	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,1,1,2-Tetrachloroethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,1,2,2-Tetrachloroethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Tetrachloroethene (PCE)	ND	0.238	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
trans-1,2-DCE	ND	0.183	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
trans-1,3-Dichloropropene	ND	0.219	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2,3-Trichlorobenzene	ND	0.438	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2,4-Trichlorobenzene	ND	0.549	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-3 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:20:00 PM

Lab ID: 1609A07-003

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
1,1,1-Trichloroethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,1,2-Trichloroethane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Trichloroethene (TCE)	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Trichlorofluoromethane	ND	0.228	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
1,2,3-Trichloropropane	ND	1.81	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Vinyl chloride	ND	0.476	1.81		µg/Kg	1	9/21/2016 12:00:00 PM	27629
Xylenes, Total	0.824	0.722	1.81	J	µg/Kg	1	9/21/2016 12:00:00 PM	27629
Surr: 1,2-Dichloroethane-d4	114	0	70-130		%Rec	1	9/21/2016 12:00:00 PM	27629
Surr: 4-Bromofluorobenzene	101	0	70-130		%Rec	1	9/21/2016 12:00:00 PM	27629
Surr: Dibromofluoromethane	105	0	70-130		%Rec	1	9/21/2016 12:00:00 PM	27629
Surr: Toluene-d8	97.9	0	70-130		%Rec	1	9/21/2016 12:00:00 PM	27629
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG	
Gasoline Range Organics (GRO)	0.79	0.48	3.2	J	mg/Kg	1	9/20/2016 7:12:59 AM	W37308
Surr: BFB	97.8	0	70-130		%Rec	1	9/20/2016 7:12:59 AM	W37308

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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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-4 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:45:00 PM

Lab ID: 1609A07-004

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	150	19	100		mg/Kg	10	9/28/2016 5:28:46 AM	27706
Motor Oil Range Organics (MRO)	ND	510	510		mg/Kg	10	9/28/2016 5:28:46 AM	27706
Surr: DNOP	0	0	70-130	S	%Rec	10	9/28/2016 5:28:46 AM	27706
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.0074	0.00055	0.032	J	mg/Kg	1	9/22/2016 2:03:40 PM	27628
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	1.2	1.0	2.5	J	mg/Kg	1	9/28/2016 4:58:54 PM	27620
Arsenic	1.5	0.88	2.5	J	mg/Kg	1	9/23/2016 10:38:54 AM	27620
Barium	720	0.35	0.50		mg/Kg	5	9/28/2016 5:00:23 PM	27620
Beryllium	0.72	0.034	0.15		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Cadmium	ND	0.063	0.099		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Chromium	9.8	0.094	0.30		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Cobalt	3.8	0.11	0.30		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Lead	1.2	0.17	0.25		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Nickel	7.1	0.15	0.50		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Selenium	ND	1.8	2.5		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Silver	ND	0.062	0.25		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Vanadium	19	0.17	2.5		mg/Kg	1	9/23/2016 10:38:54 AM	27620
Zinc	16	0.35	2.5		mg/Kg	1	9/23/2016 10:38:54 AM	27620
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Acenaphthylene	ND	0.082	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Aniline	ND	0.095	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Anthracene	ND	0.066	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Azobenzene	ND	0.12	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benz(a)anthracene	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benzo(a)pyrene	ND	0.076	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benzo(b)fluoranthene	ND	0.090	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benzo(g,h,i)perylene	ND	0.088	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benzo(k)fluoranthene	ND	0.088	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benzoic acid	0.098	0.083	0.50	J	mg/Kg	1	9/29/2016 2:40:02 PM	27700
Benzyl alcohol	ND	0.078	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Bis(2-chloroethoxy)methane	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Bis(2-chloroethyl)ether	ND	0.074	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Bis(2-chloroisopropyl)ether	ND	0.089	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Bis(2-ethylhexyl)phthalate	0.17	0.082	0.50	J	mg/Kg	1	9/29/2016 2:40:02 PM	27700
4-Bromophenyl phenyl ether	ND	0.096	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Butyl benzyl phthalate	ND	0.089	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-4 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:45:00 PM

Lab ID: 1609A07-004

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Carbazole	ND	0.068	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
4-Chloro-3-methylphenol	ND	0.12	0.50		mg/Kg	1	9/29/2016 2:40:02 PM	27700
4-Chloroaniline	ND	0.11	0.50		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2-Chloronaphthalene	ND	0.079	0.25		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2-Chlorophenol	ND	0.079	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
4-Chlorophenyl phenyl ether	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Chrysene	ND	0.085	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Di-n-butyl phthalate	0.19	0.075	0.40	J	mg/Kg	1	9/29/2016 2:40:02 PM	27700
Di-n-octyl phthalate	ND	0.085	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Dibenz(a,h)anthracene	ND	0.081	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Dibenzofuran	ND	0.10	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
1,2-Dichlorobenzene	ND	0.077	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
1,3-Dichlorobenzene	ND	0.077	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
1,4-Dichlorobenzene	ND	0.085	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
3,3'-Dichlorobenzidine	ND	0.074	0.25		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Diethyl phthalate	0.19	0.10	0.20	J	mg/Kg	1	9/29/2016 2:40:02 PM	27700
Dimethyl phthalate	ND	0.098	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,4-Dichlorophenol	ND	0.093	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,4-Dimethylphenol	ND	0.11	0.30		mg/Kg	1	9/29/2016 2:40:02 PM	27700
4,6-Dinitro-2-methylphenol	ND	0.061	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,4-Dinitrophenol	ND	0.066	0.50		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,4-Dinitrotoluene	ND	0.089	0.50		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,6-Dinitrotoluene	ND	0.11	0.50		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Fluoranthene	ND	0.058	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Fluorene	ND	0.092	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Hexachlorobenzene	ND	0.079	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Hexachlorobutadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Hexachlorocyclopentadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Hexachloroethane	ND	0.086	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Indeno(1,2,3-cd)pyrene	ND	0.078	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Isophorone	ND	0.11	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
1-Methylnaphthalene	0.16	0.10	0.20	J	mg/Kg	1	9/29/2016 2:40:02 PM	27700
2-Methylnaphthalene	0.12	0.12	0.20	J	mg/Kg	1	9/29/2016 2:40:02 PM	27700
2-Methylphenol	ND	0.084	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
3+4-Methylphenol	ND	0.073	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
N-Nitrosodi-n-propylamine	ND	0.096	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
N-Nitrosodiphenylamine	ND	0.098	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Naphthalene	ND	0.096	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2-Nitroaniline	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-4 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:45:00 PM

Lab ID: 1609A07-004

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
3-Nitroaniline	ND	0.088	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
4-Nitroaniline	ND	0.071	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Nitrobenzene	ND	0.10	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2-Nitrophenol	ND	0.099	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
4-Nitrophenol	ND	0.076	0.25		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Pentachlorophenol	ND	0.064	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Phenanthrene	ND	0.068	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Phenol	ND	0.075	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Pyrene	ND	0.076	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Pyridine	ND	0.079	0.40		mg/Kg	1	9/29/2016 2:40:02 PM	27700
1,2,4-Trichlorobenzene	ND	0.11	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,4,5-Trichlorophenol	ND	0.10	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
2,4,6-Trichlorophenol	ND	0.083	0.20		mg/Kg	1	9/29/2016 2:40:02 PM	27700
Surr: 2-Fluorophenol	61.5	0	35-97.9		%Rec	1	9/29/2016 2:40:02 PM	27700
Surr: Phenol-d5	66.0	0	37.3-105		%Rec	1	9/29/2016 2:40:02 PM	27700
Surr: 2,4,6-Tribromophenol	75.1	0	35.6-118		%Rec	1	9/29/2016 2:40:02 PM	27700
Surr: Nitrobenzene-d5	53.1		41.2-107		%Rec	1	9/29/2016 2:40:02 PM	27700
Surr: 2-Fluorobiphenyl	60.5		41.9-119		%Rec	1	9/29/2016 2:40:02 PM	27700
Surr: 4-Terphenyl-d14	52.3		15-132		%Rec	1	9/29/2016 2:40:02 PM	27700
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	ND	0.012	0.015		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Toluene	ND	0.0018	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Ethylbenzene	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Methyl tert-butyl ether (MTBE)	ND	0.0095	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2,4-Trimethylbenzene	0.020	0.0022	0.030	J	mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,3,5-Trimethylbenzene	0.012	0.0022	0.030	J	mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2-Dichloroethane (EDC)	ND	0.0079	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2-Dibromoethane (EDB)	ND	0.0021	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Naphthalene	ND	0.0047	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1-Methylnaphthalene	0.29	0.0067	0.12		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
2-Methylnaphthalene	0.34	0.0065	0.12		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Acetone	ND	0.039	0.45		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Bromobenzene	ND	0.0024	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Bromodichloromethane	ND	0.0018	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Bromoform	ND	0.0037	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Bromomethane	0.023	0.011	0.090	J	mg/Kg	1	9/20/2016 7:41:43 AM	S37308
2-Butanone	ND	0.017	0.30		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Carbon disulfide	ND	0.010	0.30		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Carbon tetrachloride	ND	0.0020	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308

Refer to the QC Summary report and 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: ASO-4 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:45:00 PM

Lab ID: 1609A07-004

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Chlorobenzene	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Chloroethane	ND	0.0060	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Chloroform	ND	0.0023	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Chloromethane	ND	0.0027	0.090		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
2-Chlorotoluene	ND	0.0022	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
4-Chlorotoluene	ND	0.0027	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
cis-1,2-DCE	ND	0.0018	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
cis-1,3-Dichloropropene	ND	0.0028	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2-Dibromo-3-chloropropane	ND	0.0092	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Dibromochloromethane	ND	0.0027	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Dibromomethane	ND	0.0026	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2-Dichlorobenzene	ND	0.0026	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,3-Dichlorobenzene	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,4-Dichlorobenzene	ND	0.0037	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Dichlorodifluoromethane	ND	0.0093	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,1-Dichloroethane	ND	0.0016	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,1-Dichloroethene	ND	0.0099	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2-Dichloropropane	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,3-Dichloropropane	ND	0.0034	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
2,2-Dichloropropane	ND	0.0017	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,1-Dichloropropene	ND	0.0024	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Hexachlorobutadiene	ND	0.0037	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
2-Hexanone	ND	0.016	0.30		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Isopropylbenzene	ND	0.0026	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
4-Isopropyltoluene	ND	0.0027	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
4-Methyl-2-pentanone	ND	0.0088	0.30		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Methylene chloride	ND	0.0087	0.090		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
n-Butylbenzene	ND	0.0027	0.090		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
n-Propylbenzene	ND	0.0023	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
sec-Butylbenzene	ND	0.0042	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Styrene	ND	0.0027	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
tert-Butylbenzene	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,1,1,2-Tetrachloroethane	ND	0.0029	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,1,2,2-Tetrachloroethane	ND	0.0049	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Tetrachloroethene (PCE)	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
trans-1,2-DCE	ND	0.0084	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
trans-1,3-Dichloropropene	ND	0.0044	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2,3-Trichlorobenzene	ND	0.0045	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2,4-Trichlorobenzene	ND	0.0032	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A07

Date Reported: 10/13/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: ASO-4 (12-18")

Project: ASO SPILL BAKER TANK

Collection Date: 9/14/2016 1:45:00 PM

Lab ID: 1609A07-004

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,1,1-Trichloroethane	ND	0.0018	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,1,2-Trichloroethane	ND	0.0036	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Trichloroethene (TCE)	ND	0.0032	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Trichlorofluoromethane	ND	0.0023	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
1,2,3-Trichloropropane	ND	0.0052	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Vinyl chloride	ND	0.0025	0.030		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Xylenes, Total	ND	0.0057	0.060		mg/Kg	1	9/20/2016 7:41:43 AM	S37308
Surr: Dibromofluoromethane	114		70-130		%Rec	1	9/20/2016 7:41:43 AM	S37308
Surr: 1,2-Dichloroethane-d4	104		70-130		%Rec	1	9/20/2016 7:41:43 AM	S37308
Surr: Toluene-d8	90.9		70-130		%Rec	1	9/20/2016 7:41:43 AM	S37308
Surr: 4-Bromofluorobenzene	82.4		70-130		%Rec	1	9/20/2016 7:41:43 AM	S37308
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG	
Gasoline Range Organics (GRO)	1.3	0.45	3.0	J	mg/Kg	1	9/20/2016 7:41:43 AM	W37308
Surr: BFB	105	0	70-130		%Rec	1	9/20/2016 7:41:43 AM	W37308

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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Anatek Labs, Inc.

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

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

Batch #: 160921029
Project Name: 1609A07

Analytical Results Report

Sample Number	160921029-001	Sampling Date	9/14/2016	Date/Time Received	9/21/2016 11:10 AM
Client Sample ID	1609A07-001C / ASO-1 (12-18)	Sampling Time	12:15 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.291	9/28/2016	MER	EPA 335.4	
%moisture	15.3	Percent		9/26/2016	MER	%moisture	

Sample Number	160921029-002	Sampling Date	9/14/2016	Date/Time Received	9/21/2016 11:10 AM
Client Sample ID	1609A07-002C / ASO-2 (12-18)	Sampling Time	12:50 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.285	9/28/2016	MER	EPA 335.4	
%moisture	12.3	Percent		9/26/2016	MER	%moisture	

Sample Number	160921029-003	Sampling Date	9/14/2016	Date/Time Received	9/21/2016 11:10 AM
Client Sample ID	1609A07-003C / ASO-3 (12-18)	Sampling Time	1:20 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.255	9/28/2016	MER	EPA 335.4	
%moisture	13.5	Percent		9/26/2016	MER	%moisture	

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

Batch #: 160921029
Project Name: 1609A07

Analytical Results Report

Sample Number	160921029-004	Sampling Date	9/14/2016	Date/Time Received	9/21/2016 11:10 AM
Client Sample ID	1609A07-004C / ASO-4 (12-18)	Sampling Time	1:45 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.225	9/28/2016	MER	EPA 335.4	
%moisture	14.6	Percent		9/26/2016	MER	%moisture	

Authorized Signature



Todd Taruscio, Lab Manager

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

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

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

Monday, October 03, 2016

Page 2 of 2

Anatek Labs, Inc.

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

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

Batch #: 160921029
Project Name: 1609A07

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.512	mg/kg	0.5	102.4	90-110	9/28/2016	9/28/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160921029-001	Cyanide	ND	14.9	mg/kg	14.6	102.1	70-130	9/28/2016	9/28/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	15.0	mg/kg	14.6	102.7	0.7	0-25	9/28/2016	9/28/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	5	9/28/2016	9/28/2016

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

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Qert0095; FL(NELAP): E871099

Monday, October 03, 2016

Page 1 of 1

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	MB-27706	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	27706		RunNo:	37493				
Prep Date:	9/26/2016	Analysis Date:	9/27/2016		SeqNo:	1166914		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	10								J
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.4	70	130			

Sample ID	LCS-27706		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 27706		RunNo: 37493					
Prep Date:	9/26/2016		Analysis Date: 9/27/2016		SeqNo: 1166917		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.1	62.6	124			
Surr: DNOP	5.2		5.000		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#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	LCSS	Batch ID:	S37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159371	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.6	70	130			
Toluene	0.97	0.050	1.000	0	96.8	70	130			
Chlorobenzene	0.92	0.050	1.000	0	92.5	70	130			
1,1-Dichloroethene	0.91	0.050	1.000	0	90.9	70	130			
Trichloroethene (TCE)	0.81	0.050	1.000	0	80.8	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.1	70	130			
Surr: Toluene-d8	0.50		0.5000		99.4	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.1	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID:	S37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159372	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	0.0049	0.050								J
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID: S37308			RunNo: 37308					
Prep Date:		Analysis Date: 9/19/2016			SeqNo: 1159372	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID:	S37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159372	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.050								
Xylenes, Total	0.011	0.10								J
Surr: Dibromofluoromethane	0.49		0.5000		97.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.2	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	MB-27629	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	27629	RunNo:	37389					
Prep Date:	9/21/2016	Analysis Date:	9/21/2016	SeqNo:	1162057	Units:	µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.00								
Toluene	ND	2.00								
Ethylbenzene	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	2.00								
1,2,4-Trimethylbenzene	ND	2.00								
1,3,5-Trimethylbenzene	ND	2.00								
1,2-Dichloroethane (EDC)	ND	2.00								
1,2-Dibromoethane (EDB)	ND	2.00								
Naphthalene	ND	2.00								
1-Methylnaphthalene	0.360	4.00								J
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	2.00								
Bromodichloromethane	ND	2.00								
Bromoform	ND	2.00								
Bromomethane	ND	3.00								
2-Butanone	ND	10.0								
Carbon disulfide	ND	10.0								
Carbon tetrachloride	ND	2.00								
Chlorobenzene	ND	2.00								
Chloroethane	ND	2.00								
Chloroform	ND	2.00								
Chloromethane	ND	2.00								
2-Chlorotoluene	ND	2.00								
4-Chlorotoluene	ND	2.00								
cis-1,2-DCE	ND	2.00								
cis-1,3-Dichloropropene	ND	2.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	2.00								
Dibromomethane	ND	2.00								
1,2-Dichlorobenzene	ND	2.00								
1,3-Dichlorobenzene	ND	2.00								
1,4-Dichlorobenzene	ND	2.00								
Dichlorodifluoromethane	ND	2.00								
1,1-Dichloroethane	ND	2.00								
1,1-Dichloroethene	ND	2.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	2.00								
2,2-Dichloropropane	ND	2.00								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	MB-27629	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	27629	RunNo:	37389					
Prep Date:	9/21/2016	Analysis Date:	9/21/2016	SeqNo:	1162057	Units:	µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	2.00								
Hexachlorobutadiene	ND	2.00								
2-Hexanone	ND	10.0								
Isopropylbenzene	ND	2.00								
4-Isopropyltoluene	ND	2.00								
4-Methyl-2-pentanone	ND	10.0								
Methylene chloride	ND	3.00								
n-Butylbenzene	ND	2.00								
n-Propylbenzene	ND	2.00								
sec-Butylbenzene	ND	2.00								
Styrene	0.320	2.00								J
tert-Butylbenzene	ND	2.00								
1,1,1,2-Tetrachloroethane	ND	2.00								
1,1,2,2-Tetrachloroethane	ND	2.00								
Tetrachloroethene (PCE)	ND	2.00								
trans-1,2-DCE	ND	2.00								
trans-1,3-Dichloropropene	ND	2.00								
1,2,3-Trichlorobenzene	ND	2.00								
1,2,4-Trichlorobenzene	ND	2.00								
1,1,1-Trichloroethane	ND	2.00								
1,1,2-Trichloroethane	ND	2.00								
Trichloroethene (TCE)	ND	2.00								
Trichlorofluoromethane	ND	2.00								
1,2,3-Trichloropropane	ND	2.00								
Vinyl chloride	ND	2.00								
Xylenes, Total	ND	2.00								
Surr: 1,2-Dichloroethane-d4	10.2		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10.2		10.00		102	70	130			
Surr: Dibromofluoromethane	10.1		10.00		101	70	130			
Surr: Toluene-d8	9.98		10.00		99.8	70	130			

Sample ID	LCS-27629	SampType:	LCS	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS	Batch ID:	27629	RunNo:	37389					
Prep Date:	9/21/2016	Analysis Date:	9/21/2016	SeqNo:	1162061	Units:	µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.90	2.00	10.00	0	99.0	70	130			
Toluene	9.97	2.00	10.00	0	99.7	70	130			
Chlorobenzene	10.1	2.00	10.00	0	101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	LCS-27629		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 27629		RunNo: 37389					
Prep Date:	9/21/2016		Analysis Date: 9/21/2016		SeqNo: 1162061		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	9.83	2.00	10.00	0	98.3	68	129			
Trichloroethene (TCE)	9.94	2.00	10.00	0	99.4	70	130			
Surr: 1,2-Dichloroethane-d4	10.4		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10.2		10.00		102	70	130			
Surr: Dibromofluoromethane	10.3		10.00		103	70	130			
Surr: Toluene-d8	9.91		10.00		99.1	70	130			

Sample ID	LCSD-27629		SampType: LCSD		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS02		Batch ID: 27629		RunNo: 37389					
Prep Date:	9/21/2016		Analysis Date: 9/21/2016		SeqNo: 1162068		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	10.1	2.00	10.00	0	101	70	130	1.80	20	
Toluene	10.0	2.00	10.00	0	100	70	130	0.600	20	
Chlorobenzene	10.1	2.00	10.00	0	101	70	130	0.199	20	
1,1-Dichloroethene	9.92	2.00	10.00	0	99.2	68	129	0.911	20	
Trichloroethene (TCE)	10.0	2.00	10.00	0	100	70	130	0.802	20	
Surr: 1,2-Dichloroethane-d4	10.5		10.00		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	10.0		10.00		100	70	130	0	0	
Surr: Dibromofluoromethane	10.2		10.00		102	70	130	0	0	
Surr: Toluene-d8	9.88		10.00		98.8	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#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	mb-27700	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	27700	RunNo:	37545					
Prep Date:	9/26/2016	Analysis Date:	9/28/2016	SeqNo:	1168037	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	0.11	0.50								J
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	0.077	0.40								J
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.40								
2,4-Dinitrophenol	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	mb-27700	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	27700	RunNo:	37545					
Prep Date:	9/26/2016	Analysis Date:	9/28/2016	SeqNo:	1168037	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.40								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.40								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.40								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.40								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2-Fluorophenol	2.6		3.330		77.4	35	97.9			
Surr: Phenol-d5	2.5		3.330		74.9	37.3	105			
Surr: 2,4,6-Tribromophenol	2.6		3.330		77.8	35.6	118			
Surr: Nitrobenzene-d5	1.0		1.670		62.6	41.2	107			
Surr: 2-Fluorobiphenyl	1.1		1.670		65.3	41.9	119			
Surr: 4-Terphenyl-d14	0.90		1.670		53.9	15	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	Ics-27700		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 27700		RunNo: 37577					
Prep Date:	9/26/2016		Analysis Date: 9/29/2016		SeqNo: 1169435		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.20	1.670	0	99.8	45.8	99.8			S
4-Chloro-3-methylphenol	3.3	0.50	3.330	0	99.1	51.5	103			
2-Chlorophenol	3.2	0.20	3.330	0	96.3	46.5	105			
1,4-Dichlorobenzene	1.6	0.20	1.670	0	98.8	45.5	103			
2,4-Dinitrotoluene	1.6	0.50	1.670	0	92.9	36	87.2			S
N-Nitrosodi-n-propylamine	1.6	0.20	1.670	0	94.1	47.3	104			
4-Nitrophenol	3.1	0.25	3.330	0	93.5	47.3	95.3			
Pentachlorophenol	3.1	0.40	3.330	0	91.8	38.7	89.3			S
Phenol	3.5	0.20	3.330	0	105	47.8	106			
Pyrene	1.7	0.20	1.670	0	101	33.4	105			
1,2,4-Trichlorobenzene	1.7	0.20	1.670	0	103	50.4	115			
Surr: 2-Fluorophenol	2.8		3.330		84.3	35	97.9			
Surr: Phenol-d5	3.0		3.330		91.3	37.3	105			
Surr: 2,4,6-Tribromophenol	3.0		3.330		91.2	35.6	118			
Surr: Nitrobenzene-d5	1.3		1.670		77.5	41.2	107			
Surr: 2-Fluorobiphenyl	1.3		1.670		78.5	41.9	119			
Surr: 4-Terphenyl-d14	1.2		1.670		68.9	15	132			

Sample ID	1609a07-001ams	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	ASO-1 (12-18")	Batch ID: 27700			RunNo: 37577					
Prep Date:	9/26/2016	Analysis Date: 9/29/2016			SeqNo: 1169437		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.0	0.20	1.655	0	62.5	39.3	86.4			
4-Chloro-3-methylphenol	2.0	0.50	3.300	0	59.4	37.5	96.4			
2-Chlorophenol	1.9	0.20	3.300	0	58.4	37.4	90.6			
1,4-Dichlorobenzene	0.87	0.20	1.655	0	52.5	31.7	85			
2,4-Dinitrotoluene	0.98	0.50	1.655	0	59.4	26.4	86			
N-Nitrosodi-n-propylamine	1.0	0.20	1.655	0	62.2	43.5	83			
4-Nitrophenol	2.1	0.25	3.300	0	63.6	32.7	98			
Pentachlorophenol	2.0	0.40	3.300	0	61.9	26.6	87.4			
Phenol	2.1	0.20	3.300	0	63.2	40.5	85.3			
Pyrene	1.0	0.20	1.655	0	62.1	23.2	93.9			
1,2,4-Trichlorobenzene	0.95	0.20	1.655	0	57.1	38.7	99			
Surr: 2-Fluorophenol	1.8		3.300		55.7	35	97.9			
Surr: Phenol-d5	1.8		3.300		55.4	37.3	105			
Surr: 2,4,6-Tribromophenol	2.2		3.300		66.9	35.6	118			
Surr: Nitrobenzene-d5	0.85		1.655		51.1	41.2	107			
Surr: 2-Fluorobiphenyl	0.88		1.655		53.4	41.9	119			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	1609a07-001ams	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	ASO-1 (12-18")	Batch ID:	27700	RunNo:	37577					
Prep Date:	9/26/2016	Analysis Date:	9/29/2016	SeqNo:	1169437	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	0.82		1.655		49.4	15	132			

Sample ID	1609a07-001amsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	ASO-1 (12-18")	Batch ID:	27700	RunNo:	37577					
Prep Date:	9/26/2016	Analysis Date:	9/29/2016	SeqNo:	1169438	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.20	1.660	0	90.3	39.3	86.4	36.7	30.2	RS
4-Chloro-3-methylphenol	2.9	0.50	3.310	0	86.4	37.5	96.4	37.4	37.2	R
2-Chlorophenol	2.8	0.20	3.310	0	83.7	37.4	90.6	35.8	48	
1,4-Dichlorobenzene	1.3	0.20	1.660	0	75.4	31.7	85	36.1	40.6	
2,4-Dinitrotoluene	1.3	0.50	1.660	0	80.4	26.4	86	30.3	47.7	
N-Nitrosodi-n-propylamine	1.5	0.20	1.660	0	89.5	43.5	83	36.2	52.5	S
4-Nitrophenol	2.8	0.25	3.310	0	84.6	32.7	98	28.7	36.6	
Pentachlorophenol	2.7	0.40	3.310	0	80.3	26.6	87.4	26.2	65.5	
Phenol	2.9	0.20	3.310	0	88.7	40.5	85.3	33.9	44	S
Pyrene	1.4	0.20	1.660	0	83.0	23.2	93.9	29.2	42.1	
1,2,4-Trichlorobenzene	1.4	0.20	1.660	0	85.8	38.7	99	40.5	31.5	R
Surr: 2-Fluorophenol	2.6		3.310		77.1	35	97.9	0	0	
Surr: Phenol-d5	2.7		3.310		80.3	37.3	105	0	0	
Surr: 2,4,6-Tribromophenol	3.0		3.310		89.9	35.6	118	0	0	
Surr: Nitrobenzene-d5	1.2		1.660		72.1	41.2	107	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.660		71.7	41.9	119	0	0	
Surr: 4-Terphenyl-d14	1.0		1.660		63.2	15	132	0	0	

Qualifiers:

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	MB-27628	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	27628	RunNo:	37428					
Prep Date:	9/21/2016	Analysis Date:	9/22/2016	SeqNo:	1163395	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-27628	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	27628	RunNo:	37428					
Prep Date:	9/21/2016	Analysis Date:	9/22/2016	SeqNo:	1163396	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.8	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	MB-27620	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 27620			RunNo: 37419					
Prep Date:	9/21/2016	Analysis Date: 9/23/2016			SeqNo: 1163026		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	0.48	2.5								J

Sample ID	LCS-27620		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 27620		RunNo: 37419					
Prep Date:	9/21/2016		Analysis Date: 9/23/2016		SeqNo: 1163027		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	21	2.5	25.00	0	83.9	80	120			
Arsenic	21	2.5	25.00	0	85.5	80	120			
Barium	21	0.10	25.00	0	84.7	80	120			
Beryllium	22	0.15	25.00	0	88.7	80	120			
Cadmium	21	0.10	25.00	0	84.9	80	120			
Chromium	21	0.30	25.00	0	84.5	80	120			
Cobalt	20	0.30	25.00	0	81.9	80	120			
Lead	21	0.25	25.00	0	82.3	80	120			
Nickel	21	0.50	25.00	0	82.2	80	120			
Selenium	21	2.5	25.00	0	85.8	80	120			
Silver	4.3	0.25	5.000	0	86.3	80	120			
Vanadium	22	2.5	25.00	0	89.5	80	120			
Zinc	21	2.5	25.00	0	82.7	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A07

13-Oct-16

Client: Western Refining Southwest, Gallup

Project: ASO SPILL BAKER TANK

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	W37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159468	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.7	62.9	123			
Surr: BFB	490		500.0		97.3	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	W37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159469	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.93	5.0								J
Surr: BFB	510		500.0		103	70	130			

Sample ID	1609A07-001A MS	SampType:	MS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	ASO-1 (12-18")	Batch ID:	W37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/20/2016	SeqNo:	1159499	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	2.8	13.94	0.5017	86.8	52.3	132			
Surr: BFB	300		278.7		107	70	130			

Sample ID	1609A07-001A MSD	SampType:	MSD	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	ASO-1 (12-18")	Batch ID:	W37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/20/2016	SeqNo:	1159500	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	2.8	13.94	0.5017	83.1	52.3	132	4.16	20	
Surr: BFB	300		278.7		108	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

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J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



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: 1609A07

RcptNo: 1

Received by/date: _____

Logged By: Anne Thorne 9/16/2016 2:00:00 PM

Anne Thorne

Completed By: Anne Thorne 9/19/2016

Anne Thorne

Reviewed By: *AT*

09/19/16

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 $>0^{\circ}\text{C}$ 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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
 Mailing Address: 92 GIANT CROSSING RD
GALLUP NM 87301
 Phone #: 505-722-0217
 Mail or Fax#: ED.RIEGE@WNR.COM

A/QC Package:
☒ Standard ☐ Other
 Accreditation:
☒ NELAP ☐ Other
 (EDD (Type)) EXCEL

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
4/6	1215	SOIL	ASO-1 (12-18")	TARS-3	NEAT	1609A17
				VIALS-2	MEOH	201
				VIALS-2	SOBI	201
				TARS-3	NEAT	202
				VIALS-2	MEOH	202
				VIALS-2	SOBI	202
				TARS-3	NEAT	203
				VIALS-2	MEOH	203
				VIALS-2	SOBI	203
				TARS-3	NEAT	204
				VIALS-2	MEOH	204
				VIALS-2	SOBI	204

Relinquished by: [Signature] Date: 9/16/16 Time: 1400
 Relinquished by: [Signature] Date: 9/16/16 Time: 1400

Turn-Around Time:

☒ Standard ☐ Rush
 Project Name:

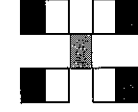
ASO SPILL BAKER TANK
 Project #:

Project Manager:

ED RIEGE

Sampler: TRACY PAYNE
 On Ice: ☒ Yes ☐ No

Sample Temperature: 20.1



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	SKINNER LIST METALS	Air Bubbles (Y or N)
		✓							✓	✓	✓	
									✓			
									✓			
		✓							✓	✓	✓	
									✓			
									✓			
									✓			
		✓							✓	✓	✓	
									✓			
									✓			
									✓			
		✓							✓	✓	✓	
									✓			
									✓			

Remarks:

Appendix C

Waste Management



6133 Edith Blvd. NE
Albuquerque, NM 87107
Phone: (505) 349-5220
Fax: (505) 344-7986

GENERATOR WASTE PROFILE SHEET

A. GENERATOR INFORMATION

Generator Name: WESTERN REFINING SOUTHWEST GALLUP REFINING
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Site Pick-up Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Technical Contact: ALVIN DORSEY
Name of Waste: PETROLEUM CONTAMINATED SOIL
Process Generating: ASO/CAUSTIC SPILL CLEAN UP

Title: MAIN CONTACT

Profile Number: GANDYASOPCS
Generator US EPA ID: NMD000333211
Phone: 800-424-9300
Fax:
Email:

NAICS CODE: 324110

Form Code: W301

Source Code: G32

B. PHYSICAL CHARACTERISTICS OF WASTE AT 25C OF 77F

Physical State: SOLID Color: BROWN Clarity: CLOUDY Phase Separation: SINGLE Odor: NONE
Number of Layers:

PH: NA Specific Gravity: > 1 SP.GR. Flash Point: > 200 F NA BTU Value: BTU/LB NA
(F):

C. Chemical Composition / UHC's

Range

BASED UPON: ANALYTICAL (INCLUDED) ☐ GENERATOR KNOWLEDGE ☒

DRO	8000	-	26000	WG/KC
GRO	190	-	420	WG/KC
PETROLEUM CONTAMINATED SOIL	100	-	100	%
TRACE BARIUM	1.2	-	1.2	MG/L
TRACE CHLOROFORM	.062	-	.062	PPM
TRACE CYANIDES	.295	-	.295	WG/KC

D. METALS

Total (PPM)

EP Toxicity (mg/l)

Arsenic:		Silver:
Barium:		Copper:
Cadmium:		Nickel:
Chromium:		Zinc:
Lead:		Thallium:
Mercury:		
Chromium, Hexavalent		
Selenium:		

E. OTHER COMPONENTS

OXIDIZER:		REACTIVE SULFIDES PPM	N
EXPLOSIVE:	N	REACTIVE CYANIDES PPM	N
SHOCK SENSITIVE:	N	WATER/AIR REACTIVE	N
TIRES:	N	THERMALLY UNSTABLE	N
PYROPHORIC:	N	TSCA REG PCB WASTE:	N
RADIOACTIVE:	N	COMPRESSED GASSES:	N
EXEMPT RAD:	N	CERCLA/SUPERFUND:	N
ETHIOLOGICAL:	N	PESTICIDE	N
		MANUFACTURING WASTE:	N

HALOGENATED ORGANIC COMPOUNDS PER 40 CFR 268, APPENDIX III
DEBRIS N <500 PPM VOC as generated NO

Subject to NESHAP Regulations

US EPA Hazardous Waste

US EPA Hazardous Waste

Codes:

F. Shipping Information:

DOT Hazardous Material NO Exempted YES

Proper Shipping Name: Non-RCRA/Non-DOT Regulated Material Solid (Petroleum Contaminated Soil)

Hazard Class:

ID #:

PG:

Anticipated Volume (Units): 60 YD

Per: YEAR

G. Special Handling Instructions:

HALL ENV ANALYTICAL ORDER # 1606180

H. GENERATOR'S CERTIFICATION:

I hereby certify that all information in this and all the attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. I further certify that any samples submitted with this profile are representative of the waste to be shipped and are taken in accordance with SW 846 or other approved procedures. I agree to notify Advanced Chemical Treatment in writing when the process generating this waste stream changes or when I have reason to believe the data contained herein is not complete and accurate.

Signature: Alvin Dorsey
Print Name: Alvin Dorsey

Signature: ENVIRONMENTAL
Title: SPECIALIST

Date: 06-21-16

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NMD000333211		Manifest Document No. <i>D119275</i>		2. Page 1 of 1	
3. Generator's Name and Mailing Address WESTERN REFINING SOUTHWEST GALLUP REFINING 92 GIANT CROSSING ROAD GALLUP, NM 87301							
4. Generator's Phone <i>505 722 9258</i>							
5. Transporter 1 Company Name Advanced Chemical Transport Inc. (SV)		6. US EPA ID Number CAR000070540		A. State Transporter's ID			
				B. Transporter 1 Phone			
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID			
				D. Transporter 2 Phone			
9. Designated Facility Name and Site Address Gandy Marley, Inc Section 4, 5, 8 & 9 of T119, R31E NMPM Chavez County, NM 88202		10. US EPA ID Number NON HAZ		E. State Facility's ID			
				F. Facility's Phone			
11. WASTE DESCRIPTION				Containers		13. Total Quantity	
				No.	Type		
a. Non-RCRA/Non-DOT Regulated Material Solid (Petroleum Contaminated Soil)				1	CM	26,260	P
b.							
c.							
d.							
G. Additional Descriptions for Materials Listed Above Project Number 101241 Document #: D119275 1) GANDYASOPCS WEG- <i>Baker Tank</i> <i>ASO Cleanup</i> <i>Bin# 22032</i>				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information 24 hour emergency contact CHEMTREC 800-424-9300							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name <i>Clara Johnson</i>				Signature <i>[Signature]</i>		Date <i>07/06/16</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials				Date			
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>		Date <i>07/06/16</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials				Date			
Printed/Typed Name				Signature		Date Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name				Signature		Date Month Day Year	

WEIGHED ON A FAIRBANKS SCALE

DATE S-26-16

CUSTOMER NAME

8:50AM ADDRESS LOOP ID 688

COMMODITY

CARRIER

INBOUND 32720 1b

56980 1b GROSS

32720 1b TARE

26260 1b NET

9:09AM

5-26-16
LOOP ID 688

Western

AD crossing rd

Ac f

REMARKS

450 Contaminated
Soil & Spell Clean up

Bin # 22032

Manifest D119275

LBS. GROSS

LBS. TARE - DRIVER ON

☒ OFF

LBS. NET @

PER LB. PRICE

SHIPPER

WEIGHER

KEO Lines

FAIRBANKS SCALE CAT. 96787

043

NON-HAZARDOUS WASTE MANIFEST

Please print or type

(Form designed for use on elite (12 pitch) typewriter)

D119267

NON-HAZARDOUS
WASTE MANIFEST1. Generator's US EPA ID No.
NMD000333211Manifest
Document No. D1192672. Page 1
of 13. Generator's Name and Mailing Address
WESTERN REFINING SOUTHWEST GALLUP REFINING
82 GIANT CROSSING ROAD
GALLUP, NM 87301
4. Generator's Phone (505) 722-92585. Transporter 1 Company Name
Advanced Chemical Transport Inc. (SV)6. US EPA ID Number
CAR000070540

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Section 4, 5, 8 & 9 of T11S, R31E NMPM
Chavez County, NM 8820210. US EPA ID Number
NON HAZ

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION

Containers

No.

Type

13.
Total
Quantity14.
Unit
Wt./Vol.a. Non-RCRA/Non-DOT Regulated Material Solid (Petroleum
Contaminated Soil)

1 CM

36,720

P

b.

c.

d.

G. Additional Descriptions for Materials Listed Above: Project Number 101239 Document #: D119267

H. Handling Codes for Wastes Listed Above

1) GANDYASOPUS WEG

Bio # ACT-2056 ASO Bkt. Tank Spill Clean up

15. Special Handling Instructions and Additional Information

24 hour emergency contact: CHEMTREC 800-424-9300

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

Printed/Typed Name

ALVIN DORSEY

Signature

Alvin Dorsey

Date

Month Day Year
07/05/16

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Martin Aranda

Signature

Martin Aranda

Date

Month Day Year
07/05/16

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name

Signature

Date

Month Day Year

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY



WEIGHED ON A FAIRBANKS SCALE

DATE 7/5/2016

MANIFEST # D/19267

CUSTOMER NAME Western

10:10AM ADDRESS 92 Grand Crossing Rd

COMMODITY ASD contamine

CARRIER INBOUND 29040 1b

65760 1b GROSS

29040 1b TARE

36720 1b NET

10:42AM 7-05-16
LOOP ID 299

REMARKS

#ACT 2056

LBS. GROSS

LBS. TARE - DRIVER ON ☒ OFF

LBS. NET @ PER LB. PRICE

SHIPPER

FAIRBANKS SCALE CAT. 96787

WEIGHER

Conito Maldonado

Appendix D

Field Methods

Appendix D

Field Methods

Shallow borings advanced with a trowel or shovel will enable the sampler to collect soil samples using the trowel or shovel. Shallow borings advanced with a hand auger will enable the sampler to collect soil samples using the auger head.

All sampling personnel will wear disposable latex or nitrile gloves while collecting and handling sampling equipment and samples. During logging and sampling, the work surface used for handling and packaging the sample will be lined with new polyethylene sheeting. This covering will be replaced between each sampling location.

Sampling equipment (auger heads, trowels, etc.) will be decontaminated between samples by removing soil from the equipment surface with a brush followed by washing the surface with a distilled water and Alconox solution. The equipment will then be triple-rinsed with distilled water and dried with a clean paper towel.

The following procedures are to be followed during sampling collection:

The soil sampling kit (Method 5035) for Volatile Organics Analysis (8260, 8021, & 8015) are to be used and consist of the following components:

- 1) **Methanol Kit** - One labelled paper envelope that contains two vials preserved with methanol and a plastic syringe.
- 2) **Sodium Bisulfate Kit** - One labelled quart sealable bag that contains two 40-ml VOA vials preserved with sodium bisulfate and placed in bubble wrap sleeve. A plastic syringe is also included.
- 3) **One 8-oz glass jar.**

Sampling procedures included:

Methanol Kit – Using new gloves take the syringe and collect 10 CCs of soil and extrude into one of the vials. Collect and extrude 10 CCs into the second vial and place both vials in the paper envelope. Seal the envelope flap with clear tape. Fill out the label with the date and time the sample was collected and the sampler's name/initials. The project location should be included on the label. All labels will be completed with waterproof ink and covered with clear tape. Place the paper envelope in a quart sealable bag. Place the quart bag in a gallon sealable bag.

Sodium Bisulfate Kit – Using new gloves, if necessary, take the syringe and collect 4 CCs of soil and extrude into one of the vials. Collect and extrude 4 CCs into the second vial and place both vials in the bubble wrap and then in the quart sealable bag. Fill out the label on the quart sealable bag and cover with clear tape. Place in the gallon sealable bag.

8-oz Jar/Teflon Lined Lid - Using new gloves, if necessary, and a clean trowel or sampling knife, fill the 8-oz jar completely with soil and seal with the lid. Fill out the label and cover with clear tape. Place the jar in bubble wrap and then in the gallon sealable bag.

If additional analyses such as metals or semivolatile organics are required, then two additional 8-oz jars must be collected.

The bags will be placed into a cooler filled with ice. The sampling location and sampling time will be recorded on the field log and the chain-of-custody form. All samples are to be kept on ice until delivered by hand to the laboratory.

The sample containers are to be secured in bubble wrap and then placed in new sealable bags. The bags will be placed into a cooler filled with ice. All samples are to be kept cold (at 4°C or below) and delivered by hand, transported to the laboratory.

Appendix E

Field Logs

Fence →

Power Pole

OK

Tank

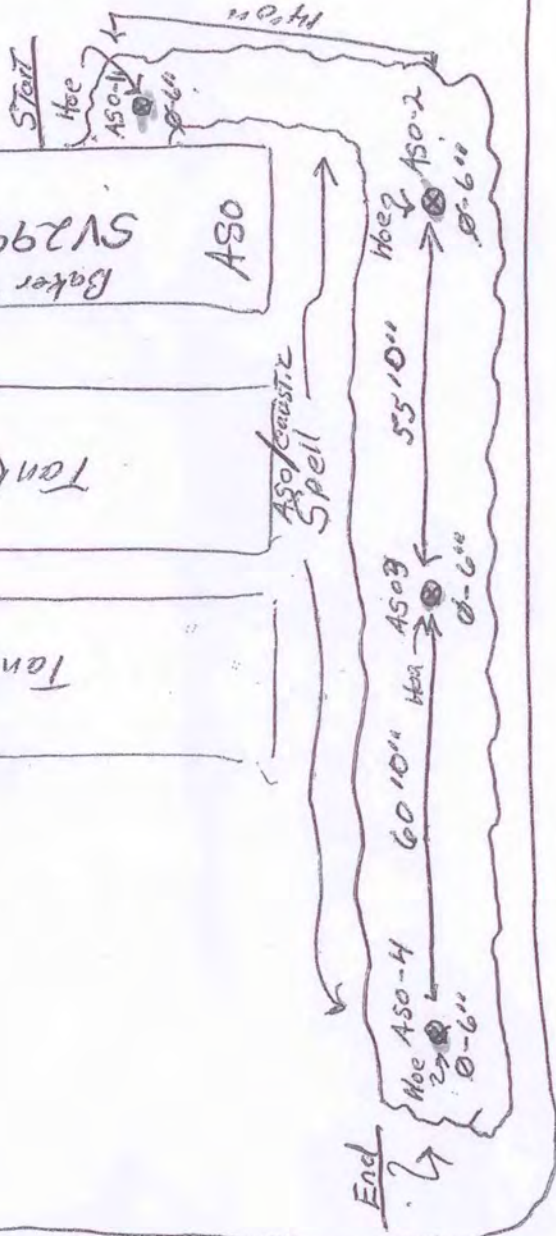
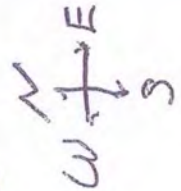
Tank

Baker Tank
SV29932
ASO

ASO/Caustic
Spill

Tank

Tank



Road To East Gate

Western Refining SW, Inc. - Gallup Refinery

[illegible]

[illegible]

[illegible]

[illegible]

RESPONSE ACTION REPORT
Baker Tank – ASO Caustic Release
April 3, 2016



Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico

EPA ID# NMD000333211

JANUARY 2017

A handwritten signature in purple ink, appearing to read 'TP 7-1', is positioned above a horizontal line.

Tracy Payne
Senior Geologist



DiSorbo
Environmental Consulting Firm

8501 North Mopac Expy
512.693.4190 (P)

Suite 300
512.279.3118 (F)

Austin, TX 78759
www.disorboconsult.com

Response Action Report Checklist – Baker Tank

Included	NA	
☒	☐	Title Page
☒	☐	Executive Summary
☒	☐	Report Checklist
☒	☐	Table of Contents
☒	☐	Section 1 - Introduction
☒	☐	General information about Gallup Refinery and Area of Release
☒	☐	Description of the Release
☒	☐	Characterization of Released Material
☒	☐	o Discussion of the Unit / Process / Area of Release (as applicable)
☒	☐	o Location of unit(s) on a topographic map of appropriate scale
☒	☐	o Designation of type and function of unit(s)
☒	☐	o General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings)
☒	☐	o Dates that the unit(s) was operated;
☐	☒	o Specifications of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous waste or hazardous constituents in the wastes
☒	☐	o All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include ground water data, soil analyses, air, and surface water data).
☒	☐	Site Conditions That Affected Release
☒	☐	Section 2 - Remediation Activities
☒	☐	Detailed discussion of remediation, what type of cleanup conducted, where was it conducted (GPS coordinates or measurements to physical site features), dimensions of excavation, volumes of remediation waste, characterization sampling, disposition of wastes
☒	☐	Soil Sampling – detailed discussion of sample collection and analysis
☒	☐	Soil Field Screening
☐	☒	Subsurface soil sampling – detailed discussion on soil borings, sampling and analysis
☒	☐	Groundwater Conditions – detailed discussion well installation and groundwater sample collection and analysis
☒	☐	Section 3 – Regulatory Criteria Comparisons
☒	☐	Presentation of applicable regulatory screening criteria and comparison to site concentrations.
☒	☐	Section 4 – Conclusions and Recommendations - NMED Concurrence – No Further Action Required - Deferral – Release Area within Existing SWMU / AOC - Possible consideration for SWMU Assessment Report
☒	☐	Tables – Soil and/or Groundwater Data
☒	☐	Figures ☒ Figure – Affected Area - Topo Map ☒ Figure - Area Affected by Release – Aerial Photo ☒ Figure - Aerial Photo – Tank – Unit – Process Area

		☒ Figure - Extent of Excavation Activities ☒ Figure - Sampling Locations (Soil, Wells, Surface Water)
☒	☐	Appendices
☒	☐	Appendix – Analytical
☒	☐	Appendix – Photos
☒	☐	Appendix – Waste Manifests
☐	☒	Appendix – Calculations for Reportable Quantities
☐	☒	Appendix – Form C-141 Release Notification and Corrective Action
☒	☐	Appendix – Boring Logs/Monitoring Well Completion Logs
☒	☐	Appendix – Standard Operating Procedures
☒	☐	Appendix – Field Methods / Sampling Procedures

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Appendix B Analytical Data Reports

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Appendix D Field Methods

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Appendix F Photographs of Soil Sampling Locations September 14, 2016

Executive Summary

The Gallup Refinery is located 17 miles east of Gallup, New Mexico. This Response Action Report provides the details and data for an Acid-Soluble Oil (ASO) - caustic release from a Baker Tank on April 3, 2016. The tank is located in the portable tank storage area south of the Hot Oil Tank Farm.

Soil was excavated from the spill area. Soil confirmation samples were collected and analyzed for volatile organics, total petroleum hydrocarbons, semivolatile organics, and metals.

The 1-Methylnaphthalene concentration reported in the soil confirmation sample ASO-4 (12-18") was reported to exceed the screening level.

Section 1

Introduction

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery property covers approximately 810 acres. Figure 1 presents the location of the portable tanks in the southeastern portion of the refinery property. Figure 2 presents an aerial photograph of the portable tank storage location.

1.1 General Information

The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck. Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, sulfur recovery, mercox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

1.2 Discussion of the Release

At 11:45 AM on April 3, 2016 a load of caustic material from the API knock out drum was off loaded into a Baker Tank that was storing ASO. A chemical reaction occurred due to the mixing of incompatible wastes. The Baker Tank overflowed causing approximately four barrels of the material to be spilled onto the ground. The spilled material flowed south to the East Gate Road and then westward along the road. A C-141 was not initiated for this release since the total volume was less than five barrels.

Four personal H₂S monitors were activated during the incident. The personnel left the area immediately. The area was immediately blocked off to traffic. The refinery fire department began monitoring the area with LEL/H₂S monitors. Using supplied air, the spill response personnel vacuumed the spill material from the ground and from within the Baker Tank secondary containment. The environmental department was notified of the incident.

1.3 Characterization of the Release Material

The product released to the ground consisted of a mixture of caustic material from the API knock out drum and ASO that was stored in the Baker Tank. Approximately 4 barrels of the mixture contacted the ground surface.

1.4 Discussion of the Portable Tank Storage Area

The storage area for portable tanks is located south of the hot oil tank farm. Fixed axle storage tanks are located in this area and are used to store oily water. The tanks are parked perpendicular to the East Gate Road such that the valve works on each tank is adjacent to the north side of the road. Each tank has a capacity of between 450 to 550 barrels of fluid. The tanks are typically 9 feet wide, 12 feet tall and 40 to 50 feet in length. The tanks are constructed of carbon steel and have a v-bottom or round bottom. The interiors of the tanks are coated with a chemical resistant coating. Fluids are transported to and from the tanks using vacuum trucks. Photographs of the portable tank storage area are included in Appendix A.

1.5 Site Conditions That Affect the Release

Local site topographic features include high ground in the southeast gradually decreasing to lowland fluvial plain in the northwest. Elevations on the refinery property range from 7,040 feet to 6,860 feet. The storage area for the portable tanks is at an approximate elevation of 6,965 feet above mean sea level (msl).

The ground surface in the area gently slopes from the north to the south and from the east to the west. The release travelled from north to south along Baker Tank until it encountered the East Gate Road, which is higher in elevation. The release then travelled from the east to the west between the East Gate Road and the southernmost ends of the tanks. The release also travelled southward across the East Gate Road and pooled in a depression in the ground surface.

Section 2

Remediation Activities

2.1 Remediation

The remediation of the ASO Caustic release from the Baker Tank consisted of the initial remediation and one soil excavation events. Field screening (e.g., visual and olfactory) was conducted during the excavation events to determine the extent of the remediation. The final remediation decisions are based on the laboratory analytical results and not the results of field screening.

2.1.1 Initial Remediation

During the spill event four personal H₂S monitors were activated. The personnel left the area immediately. The area was immediately blocked off to traffic. The refinery fire department began monitoring the area with LEL/H₂S monitors. Using supplied air, the spill response personnel vacuumed the spill material from the ground and from within the Baker Tank secondary containment. The environmental department was notified of the incident.

Maintenance personnel excavated the soils that were in contact with the spill material. Approximately 6 inches of soil was removed. Figure 3 depicts the extent of the soil contamination. The excavated soils were placed in two roll-off bins. On May 31, 2016 a five-part composite soil sample was collected from each bin. The two samples were submitted to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis. The samples were analyzed for the following:

- Total Petroleum Hydrocarbons;
- TCLP Metals;
- TCLP 8260B; and
- TCLP 8270C.

Analytical Report No. 1606180 was issued on June 20, 2016. A copy of the report is included in Appendix B. The contents of the two roll-off bins were determined not to be characteristically hazardous. A copy of the waste profile sheet and the waste manifests are included in Appendix C. Approximately 62,980 pounds of non-hazardous contaminated soil was shipped to Gandy Marley Inc. in Chavez County, New Mexico.

The soils that were located within the extent of visible soil contamination were excavated. Figure 4 depicts the extent of the soil excavation.

2.1.2 Additional Remediation – May 2, 2016

Additional soil excavation was conducted on May 2, 2016 in the entire extent of the release. Approximately 6 inches of soil was removed from the spill area. The excavation was back filled with gravel. Approximately 19,480 pounds of soil were excavated and loaded into one roll-off box. The roll-off box was shipped to Gandy Marley, Inc. on October 27, 2016. Figure 4 depicts the extent of the soil excavation. A copy of the waste manifest is included in Appendix C.

2.2 Assessment – Soil Confirmation Sampling Event No. 1

2.2.1 Soil Sampling

On April 15, 2016, a four-part composite sample was collected from the excavated area (approximately six inches in depth). Each of the four samples were collected from a depth of 0 to 6 inches and composited. Figure 4 depicts the locations of the four soil samples. The area where the release crossed the East Gate Road and pooled in a depression was not sampled during this event. A copy of the field methods used to collect the soil samples is included as Appendix D. A copy of the field diagram used to depict the soil sampling locations is included in Appendix E.

2.2.2 Soil Screening Results

Soil samples were collected from locations based on field screening (e.g., olfactory, staining) and were considered to be the most representative of the soil conditions.

2.2.3 Soil Sampling Analytical Results

On April 27, 2016 the composite soil sample was delivered to HEAL. The soil sample was analyzed for the following:

- TPH – EPA Method 8015B;
- Skinner List Volatile Organics – EPA Method 8260B;
- Skinner List Semivolatile Organics – EPA Method 8270B; and
- Skinner List Metals – EPA Method 6010B & 7470.

On May 5, 2016 HEAL issued Analytical Report No. 1604C16. A copy of the report is provided in Appendix B. Table 1 provides a summary of the analytical results.

2.3 Assessment – Soil Confirmation Sampling Event No. 2

2.3.1 Soil Sampling

On September 14, 2016, four discrete soil samples were collected from the area created after the additional excavation was conducted on May 2, 2016. The approximate depth of the excavation after the second excavation event was 12 inches and had been backfilled with gravel. A hand auger was advanced through the 1 foot of gravel backfill. Each of the four samples were collected from a depth of 12 to 18 inches. The hand auger was decontaminated between each location. Figure 4 depicts the locations of the four discrete soil samples. A copy of the field methods used to collect the soil samples is included as Appendix D. A copy of each soil sampling log is included in Appendix E. GPS coordinates were collected at each sampling location. In addition, the distances between each sampling location was measured. Photographs were taken of the soil sampling locations and are included in Appendix F.

2.3.2 Soil Screening Results

Soil samples were collected from locations based on field screening (e.g., olfactory, staining) and were considered to be the most representative of the soil conditions.

2.3.3 Soil Sampling Analytical Results

On September 16, 2016 the four discrete soil samples were delivered to HEAL. The soil samples were analyzed for the following:

- Total Petroleum Hydrocarbons – EPA Method 8015B;
- Volatile Organics - EPA Method 8260B;
- Semivolatile Organics - EPA Method 8270B; and
- Skinner List Metals – EPA Method 6010B & 7470.

On October 13, 2016 HEAL issued Analytical Report No. 1609A07. A copy of the report is provided in Appendix D. Table 2 provides a summary of the analytical results.

2.4 Subsurface Soil Conditions

No soil borings or monitor wells were installed during the investigation.

2.5 Groundwater Conditions

A groundwater investigation was not conducted. There are currently no groundwater monitoring wells in the immediate area of the Portable Tank Storage Area. The nearest monitor well to the Portable Tank Storage Area is MKTF-37 which is approximately 1000 feet northwest of the release area. The depth to groundwater in this well is approximately 7 feet below ground level.

2.6 Surface Water Conditions

The ASO Caustic release flowed eastward down a ditch and southward across the East Gate Road pooling in a small depression. The release was confined to the plant property and did not reach surface water.

2.7 Surface Air and Subsurface Vapor Conditions

During the spill event four personal H₂S monitors were activated. The personnel left the area immediately. The area was immediately blocked off to traffic. The refinery fire department began monitoring the area with LEL/H₂S monitors. Using supplied air, the spill response personnel vacuumed the spill material from the ground and from within the Baker Tank secondary containment. The environmental department was notified of the incident.

Section 3

Regulatory Criteria Comparisons

The potential cleanup levels (i.e., screening levels) are specified in NMED's *Risk Assessment Guidance for Site Investigations and Remediation* dated July 2015 and in the Environmental Protection Agency's (EPA) Regional Screening Levels dated June 2015 if NMED values are not available.

For non-residential properties (e.g., the Gallup Refinery), the soil screening levels (SSLs) must be protective of commercial/industrial workers throughout the upper one foot of surface soils and construction workers throughout the upper ten feet based on NMED criteria. NMED residential soil screening levels are applied to the upper ten feet and soil screening levels for protection of groundwater apply throughout the vadose zone. EPA soil screening levels for direct contact exposure apply to the upper two feet of the vadose zone. The cleanup criteria is shown in Table 1.

A review of the analytical results reported that the 1-Methylnaphthalene concentration exceeded the Risk Based SSL for a Dilution Attenuation Factor of 20 (0.116 mg/kg) in sample ASO-4 (12-18").

Section 4

Conclusions and Recommendations

The Baker Tank overflowed on Friday, April 15, 2016 in the tank storage area located south of the Hot Oil Tank Farm. All liquid was contained to the north side of the East Gate Road. It was estimated that 4 barrels of caustic and ASO were spilled to the ground surface.

4.1 Soil Confirmation Sampling Results

A review of the analytical results reported that the 1-Methylnaphthalene concentration (0.29 mg/kg) exceeded the Risk Based SSL for a Dilution Attenuation Factor of 20 (0.116 mg/kg) in sample ASO-4 (12-18").

4.2 Recommended Additional Excavation and Assessment

The reported concentration for 1-Methylnaphthalene did exceed the Risk Based SSL for a DAF of 20, but is very low at 0.29 mg/kg. This exceedance at the near surface is unlikely to pose a threat to groundwater resources. No further action is recommended for this area

.

Tables

Table 1	Soil Analytical Results – April 15, 2016
Table 2	Soil Analytical Results – September 14, 2016

Table 1
Soil Analytical Results - April 15, 2016
Baker Tank - ASO Caustic Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO CAUSTIC SPILL KIT
Hall Environmental Lab ID							1604C16-001
Sample Date							4/15/2016
EPA Method 8015D - mg/kg							
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	4400
Gasoline Range Organics (GRO)	-	-	-	-	-	-	100
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<4800
EPA Method 7470 mg/kg							
Mercury	2.38E+01	(1)	2.07E+01	(5)	6.54E-01	(8)	0.040
EPA Method 335.4 - mg/kg							
Cyanide	1.12E+01	(1)	1.21E+01	(5)	5.22E-03	(8)	<0.263
EPA Method 6010B Soil Metals - mg/kg							
Antimony	3.13E+01	(1)	1.42E+02	(5)	6.56E+00	(8)	<1.2
Arsenic	4.25E+00	(1)	2.15E+01	(4)	2.99E-01	(8)	0.93
Barium	1.56E+04	(1)	4.35E+03	(5)	2.70E+03	(8)	170
Beryllium	1.56E+02	(1)	1.48E+02	(5)	1.96E+02	(8)	0.43
Cadmium	7.05E+01	(1)	7.21E+01	(5)	9.39E+00	(8)	<0.062
Chromium	9.66E+01	(1)	1.34E+02	(5)	2.01E+05	(8)	5.9
Cobalt	2.30E+01	(2)	3.50E+02	(6)	5.40E+00	(9)	2.5
Lead	4.00E+02	(1)	8.00E+02	(4)	2.80E+02	(10)	3.3
Nickel	1.56E+03	(1)	6.19E+03	(5)	4.85E+02	(8)	5.4
Selenium	3.91E+02	(1)	1.75E+03	(5)	1.02E-01	(8)	<1.1
Silver	3.91E+02	(1)	1.77E+03	(5)	1.38E+01	(8)	<0.031
Vanadium	3.94E+02	(1)	6.14E+02	(5)	1.26E+03	(8)	14
Zinc	2.35E+04	(1)	1.06E+05	(5)	7.41E+03	(8)	20
EPA Method 8260B - mg/kg							
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02		<0.038
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E+01		<0.024
1,1,2,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03		<0.064
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03		<0.046
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01		<0.021
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.13
1,1-Dichloropropene	-	-	-	-	-	-	<0.031
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.059
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<0.068
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.042
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	11
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.12
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<0.028
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.034
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<0.10
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<0.033
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	2.9
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.032
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<0.045
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.049
1,4-Dioxane	5.30E+01	(3)	2.40E+02	(7)	#REF!	(9)	<1.8
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	30
2,2-Dichloropropane	-	-	-	-	-	-	<0.022
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	<0.22
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.029

Table 1
Soil Analytical Results - April 15, 2016
Baker Tank - ASO Caustic Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO CAUSTIC SPILL KIT
Hall Environmental Lab ID							1604C16-001
Sample Date							4/15/2016
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.21
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	68
4-Chlorotoluene	-	-	-	-	-	-	<0.029
4-Isopropyltoluene	-	-	-	-	-	-	0.30
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.11
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	<0.51
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<0.16
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.032
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<0.023
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<0.048
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	<0.14
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.13
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<0.026
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.032
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.078
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<0.030
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.035
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<0.023
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.036
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<0.035
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<0.034
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.12
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	0.42
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.048
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	0.15
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.12
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	<0.11
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	18
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	1.4
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	0.72
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	0.29
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.035
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.033
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.033
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	0.21
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.11
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.057
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<0.042
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.029
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.032
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	3.6
EPA Method 8270B - mg/kg							
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.25
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.25
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.25
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	29.7
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<0.25
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<0.25

Table 1
Soil Analytical Results - April 15, 2016
Baker Tank - ASO Caustic Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO CAUSTIC SPILL KIT
Hall Environmental Lab ID							1604C16-001
Sample Date							4/15/2016
2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<0.25
3+4-Methylphenol	-	-	-	-	-	-	<0.25
4-Nitrophenol	-	-	-	-	-	-	<0.25
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<0.25
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<0.25
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<0.25
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<0.25
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<0.25
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<0.25
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	<0.25
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<0.25
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<0.25
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	<0.25
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<0.25
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	<0.25
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<0.25
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	2.10
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<0.25
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	14.8
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	3.84
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	<0.25
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<0.25
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<0.25
Quinoline	1.80E-01	(3)	7.70E-01	(7)	#REF!	(9)	<0.25

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA

Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA

Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

(11) NMED Table 6-2 TPH Soil Screening Levels "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Table 2
Soil Analytical Results - September 14, 2016
Baker Tank ASO Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO-1 (12-18")	ASO-2 (12-18")	ASO-3 (12-18")	ASO-4 (12-18")
Hall Environmental Analytical Lab ID							1609A07-001	1609A07-002	1609A07-003	1609A07-004
Sample Date							9/14/2016	9/14/2016	9/14/2016	9/14/2016
EPA Method 8015D - mg/kg										
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<1.9	12	6.5	150
Gasoline Range Organics (GRO)	-	-	-	-	-	-	0.50 J	0.92 J	0.79 J	1.3 J
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<50	<49	<50	<510
EPA Method 7470 mg/kg										
Mercury	2.38E+01	(1)	2.07E+01	(5)	6.54E-01	(8)	0.0028 J	0.0042 J	0.0026	0.0074
EPA Method 6010B Soil Metals - mg/kg										
Antimony	3.13E+01	(1)	1.42E+02	(5)	6.56E+00	(8)	<1.0	<0.99	<0.97	1.2
Arsenic	4.25E+00	(1)	2.15E+01	(4)	2.99E-01	(8)	1.7 J	2.3 J	3.2	1.5
Barium	1.56E+04	(1)	4.35E+03	(5)	2.70E+03	(8)	220	800	760	720
Beryllium	1.56E+02	(1)	1.48E+02	(5)	1.96E+02	(8)	0.84	0.65	0.70	0.72
Cadmium	7.05E+01	(1)	7.21E+01	(5)	9.39E+00	(8)	<0.063	<0.062	<0.061	<0.063
Chromium	9.66E+01	(1)	1.34E+02	(5)	2.01E+05	(8)	10	8.5	8.1	9.8
Cobalt	2.30E+01	(2)	3.50E+02	(6)	5.40E+00	(9)	3.9	3.4	3.5	3.8
Lead	4.00E+02	(1)	8.00E+02	(4)	2.80E+02	(10)	2.6	2.0	2.0	1.2
Nickel	1.56E+03	(1)	6.19E+03	(5)	4.85E+02	(8)	7.3	5.9	6.0	7.1
Selenium	3.91E+02	(1)	1.75E+03	(5)	1.02E-01	(8)	<1.8	<1.8	<1.7	<1.8
Silver	3.91E+02	(1)	1.77E+03	(5)	1.38E+01	(8)	<0.062	<0.061	<0.060	<0.062
Vanadium	3.94E+02	(1)	6.14E+02	(5)	1.26E+03	(8)	17	19	18	19
Zinc	2.35E+04	(1)	1.06E+05	(5)	7.41E+03	(8)	14	11	11	16
EPA Method 335.4 - mg/kg										
Cyanide	1.12E+01	(1)	1.21E+01	(5)	5.22E-03	(8)	<0.291	<0.285	<0.255	<0.225
EPA Method 8260B - mg/kg										
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02	(8)	<0.00156	<0.0032	<0.00181	<0.0029
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E+01	(8)	<0.00156	<0.0020	<0.00181	<0.0018
1,1,2,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03	(8)	<0.00156	<0.0054	<0.00181	<0.0049
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03	(8)	<0.00156	<0.0040	<0.00181	<0.0036
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01	(8)	<0.00156	<0.0018	<0.00181	<0.0016
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.000255	<0.011	<0.000297	<0.0099
1,1-Dichloropropene	-	-	-	-	-	-	<0.00156	<0.0027	<0.00181	<0.0024
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.000377	<0.0050	<0.000438	<0.0045
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<0.00156	<0.0058	<0.00181	<0.0052
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.000473	<0.0036	<0.000549	<0.0032
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	0.000335 J	0.0059 J	0.000344 J	0.020 J
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.000166	<0.010	<0.000193	<0.0092
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<0.00156	<0.0024	<0.00181	<0.0021
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.000227	<0.0029	<0.000264	<0.0026

Table 2
Soil Analytical Results - September 14, 2016
Baker Tank ASO Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO-1 (12-18")	ASO-2 (12-18")	ASO-3 (12-18")	ASO-4 (12-18")
Hall Environmental Analytical Lab ID							1609A07-001	1609A07-002	1609A07-003	1609A07-004
Sample Date							9/14/2016	9/14/2016	9/14/2016	9/14/2016
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<0.00156	<0.0087	<0.00181	<0.0079
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<0.00156	<0.0028	<0.00181	<0.0025
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	0.000273 J	0.0073 J	<0.000299	0.012 J
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.000288	<0.0027	<0.000334	<0.0025
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<0.00156	<0.0038	<0.00181	<0.0034
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.000292	<0.0042	<0.000339	<0.0037
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.000177	0.11 J	0.000715 J	0.29
2,2-Dichloropropane	-	-	-	-	-	-	<0.000197	<0.0019	<0.000229	<0.0017
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	<0.000562	<0.019	<0.000653	<0.017
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.000265	<0.0025	<0.000308	<0.0022
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.000388	<0.018	<0.000451	<0.016
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.000410	0.059 J	0.00101 J	0.34
4-Chlorotoluene	-	-	-	-	-	-	<0.000259	<0.0030	<0.000301	<0.0027
4-Isopropyltoluene	-	-	-	-	-	-	<0.000292	<0.0030	<0.000340	<0.0027
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.00312	<0.0098	<0.00362	<0.0088
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	0.00810	<0.043	0.00578 J	<0.039
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<0.00156	<0.013	<0.00181	<0.012
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.000159	<0.0027	<0.000184	<0.0024
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<0.00156	<0.0020	<0.00181	<0.0018
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<0.00156	<0.0041	<0.00181	<0.0037
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	<0.000281	<0.012	<0.000326	0.023 J
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.000576	<0.011	<0.000670	<0.010
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<0.00156	<0.0022	<0.00181	<0.0020
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.000179	<0.0027	<0.000208	<0.0025
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.000288	<0.0067	<0.000334	<0.0060
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<0.00156	<0.0025	<0.00181	<0.0023
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.000395	<0.0030	<0.000459	<0.0027
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<0.00156	<0.0019	<0.00181	<0.0018
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.00156	<0.0031	<0.00181	<0.0028
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<0.00156	<0.0030	<0.00181	<0.0027
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<0.00156	<0.0029	<0.00181	<0.0026
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.000910	<0.010	<0.00106	<0.0093
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	0.000327 J	<0.0027	0.000254 J	<0.0025
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.000355	<0.0041	<0.000413	<0.0037
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	0.000210 J	<0.0029	<0.000228	<0.0026
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.000262	<0.011	<0.000304	<0.0095

Table 2
Soil Analytical Results - September 14, 2016
Baker Tank ASO Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO-1 (12-18")	ASO-2 (12-18")	ASO-3 (12-18")	ASO-4 (12-18")
Hall Environmental Analytical Lab ID							1609A07-001	1609A07-002	1609A07-003	1609A07-004
Sample Date							9/14/2016	9/14/2016	9/14/2016	9/14/2016
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	<0.00156	<0.0097	<0.00181	<0.0087
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.00156	<0.0052	<0.00181	<0.0047
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	<0.000380	<0.0030	<0.000441	<0.0027
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	<0.000279	<0.0026	<0.000324	<0.0023
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	<0.000277	<0.0046	<0.000322	<0.0042
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.000199	<0.0030	<0.000231	<0.0027
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.00228	<0.0028	<0.000265	<0.0025
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.000205	<0.0028	<0.000238	<0.0025
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	0.000966 J	<0.0020	0.000417 J	<0.0018
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.000157	<0.0094	<0.000183	<0.0084
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.000189	<0.0049	<0.000219	<0.0044
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<0.00156	<0.0036	<0.00181	<0.0032
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.000196	<0.0025	<0.000228	<0.0023
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.000410	<0.0027	<0.000476	<0.0025
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	0.00111 J	<0.0063	0.000824 J	<0.0057
EPA Method 8270C - mg/kg										
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.11	<0.11	<0.11	<0.11
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.076	<0.076	<0.075	<0.077
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.076	<0.077	<0.075	<0.077
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.084	<0.084	<0.083	<0.085
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.099	<0.10	<0.098	0.16 J
2,4,5-Trichlorophenol	6.16E+03	(1)	2.69E+04	(5)	6.62E+01	(8)	<0.099	<0.10	<0.098	<0.10
2,4,6-Trichlorophenol	6.16E+01	(1)	2.69E+02	(5)	6.74E-01	(8)	<0.082	<0.083	<0.081	<0.083
2,4-Dichlorophenol	1.85E+02	(1)	8.07E+02	(5)	8.25E-01	(8)	<0.092	<0.093	<0.091	<0.093
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<0.11	<0.11	<0.11	<0.11
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<0.066	<0.066	<0.065	<0.066
2,4-Dinitrotoluene	1.71E+01	(1)	8.23E+01	(4)	4.91E-02	(8)	<0.088	<0.089	<0.087	<0.089
2,6-Dinitrotoluene	3.56E+00	(1)	1.72E+01	(4)	1.02E-02	(8)	<0.10	<0.11	<0.10	<0.11
2-Chloronaphthalene	6.26E+03	(1)	2.83E+04	(5)	5.70E+01	(8)	<0.078	<0.078	<0.077	<0.079
2-Chlorophenol	3.91E+02	(1)	1.77E+03	(5)	1.15E+00	(8)	<0.078	<0.079	<0.077	<0.079
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.12	<0.12	<0.12	0.12 J
'2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<0.083	<0.083	<0.082	<0.084
2-Nitroaniline	6.30E+02	(2)	8.00E+03	(6)	1.60E+00	(9)	<0.11	<0.11	<0.11	<0.11
2-Nitrophenol	-	-	-	-	-	-	<0.098	<0.099	<0.097	<0.099
3,3'-Dichlorobenzidine	1.18E+01	(1)	5.70E+01	(4)	1.23E-01	(8)	<0.073	<0.073	<0.072	<0.074
3+4-Methylphenol	-	-	-	-	-	-	<0.072	<0.072	<0.071	<0.073

Table 2
Soil Analytical Results - September 14, 2016
Baker Tank ASO Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO-1 (12-18")	ASO-2 (12-18")	ASO-3 (12-18")	ASO-4 (12-18")
Hall Environmental Analytical Lab ID							1609A07-001	1609A07-002	1609A07-003	1609A07-004
Sample Date							9/14/2016	9/14/2016	9/14/2016	9/14/2016
3-Nitroaniline	-	-	-	-	-	-	<0.087	<0.088	<0.086	<0.088
4,6-Dinitro-2-methylphenol	4.93E+00	(1)	2.15E+01	(5)	3.94E-02	(8)	<0.060	<0.060	<0.059	<0.061
4-Bromophenyl phenyl ether	-	-	-	-	-	-	<0.094	<0.095	<0.093	<0.096
4-Chloro-3-methylphenol	-	-	-	-	-	-	<0.12	<0.12	<0.12	<0.12
4-Chloroaniline	2.70E+01	(3)	1.10E+02	(7)	3.20E-03	(9)	<0.11	<0.11	<0.11	<0.11
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	<0.11	<0.11	<0.11	<0.11
4-Nitroaniline	2.70E+02	(3)	1.10E+03	(7)	3.20E-02	(9)	<0.070	<0.070	<0.069	<0.071
4-Nitrophenol	-	-	-	-	-	-	<0.075	<0.076	<0.074	<0.076
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<0.085	<0.085	<0.084	<0.086
Acenaphthylene	-	-	-	-	-	-	<0.080	<0.081	<0.079	<0.082
Aniline	9.50E+02	(3)	4.00E+03	(7)	9.20E-02	(9)	<0.093	<0.094	<0.092	<0.095
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<0.066	<0.066	<0.065	<0.066
Azobenzene	5.60E+01	(3)	2.60E+02	(7)	1.84E+06	(9)	<0.12	<0.12	<0.12	<0.12
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<0.085	<0.086	<0.084	<0.086
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<0.075	<0.075	<0.074	<0.076
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<0.089	<0.090	<0.088	<0.090
Benzo(g,h,i)perylene	-	-	-	-	-	-	<0.087	<0.088	<0.086	<0.088
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<0.087	<0.088	<0.086	<0.088
Benzoic acid	2.50E+05	(2)	3.30E+06	(6)	3.60E+02	(9)	<0.082	<0.083	<0.081	0.098 J
Benzyl alcohol	6.30E+03	(2)	8.20E+04	(6)	9.60E+00	(9)	<0.077	<0.078	<0.076	<0.078
Bis(2-chloroethoxy)methane	1.90E+02	(2)	2.50E+03	(6)	2.60E-01	(9)	<0.11	<0.11	<0.11	<0.11
Bis(2-chloroethyl)ether	3.11E+00	(1)	1.95E+00	(5)	6.05E-04	(8)	<0.073	<0.073	<0.072	<0.074
Bis(2-chloroisopropyl)ether	9.93E+01	(1)	5.19E+02	(4)	4.73E-02	(8)	<0.088	<0.089	<0.087	<0.089
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	0.13 J	0.16 J	0.11 J	0.17 J
Butyl benzyl phthalate	2.90E+03	(3)	1.20E+04	(7)	4.60E+00	(9)	<0.087	<0.088	<0.086	<0.089
Carbazole	-	-	-	-	-	-	<0.067	<0.067	<0.066	<0.068
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<0.084	<0.085	<0.083	<0.085
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<0.080	<0.081	<0.079	<0.081
Dibenzofuran	-	-	-	-	-	-	<0.099	<0.10	<0.098	<0.10
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	0.12 J	0.13 J	0.13 J	0.19 J
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<0.097	<0.097	<0.095	<0.098
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	0.10 J	0.11 J	0.085 J	0.19 J
Di-n-octyl phthalate	-	-	-	-	-	-	<0.084	<0.085	<0.083	<0.085
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<0.057	<0.057	<0.056	<0.058
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	<0.090	<0.091	<0.089	<0.092
Hexachlorobenzene	3.33E+00	(1)	1.60E+01	(4)	9.22E-02	(8)	<0.078	<0.079	<0.077	<0.079

Table 2
Soil Analytical Results - September 14, 2016
Baker Tank ASO Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	ASO-1 (12-18")	ASO-2 (12-18")	ASO-3 (12-18")	ASO-4 (12-18")
Hall Environmental Analytical Lab ID							1609A07-001	1609A07-002	1609A07-003	1609A07-004
Sample Date							9/14/2016	9/14/2016	9/14/2016	9/14/2016
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.11	<0.11	<0.11	<0.11
Hexachlorocyclopentadiene	3.70E+02	(1)	8.67E+02	(5)	1.34E+00	(8)	<0.11	<0.11	<0.11	<0.11
Hexachloroethane	4.31E+01	(1)	1.88E+02	(5)	6.62E-02	(8)	<0.085	<0.086	<0.084	<0.086
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<0.077	<0.078	<0.076	<0.078
Isophorone	-	-	-	-	-	-	<0.11	<0.11	<0.11	<0.11
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.095	<0.096	<0.094	<0.096
Nitrobenzene	6.04E+01	(1)	2.93E+02	(4)	1.44E-02	(8)	<0.10	<0.10	<0.10	<0.10
N-Nitrosodi-n-propylamine	7.80E-01	(3)	3.30E+00	(7)	1.62E-04	(9)	<0.095	<0.096	<0.094	<0.096
N-Nitrosodiphenylamine	7.94E-03	(1)	1.71E-01	(4)	9.84E-06	(8)	<0.096	<0.097	<0.095	<0.098
Pentachlorophenol	9.85E+00	(1)	4.45E+01	(4)	6.08E-02	(8)	<0.063	<0.064	<0.063	<0.064
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	<0.067	<0.068	<0.066	<0.068
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	<0.074	<0.075	<0.074	<0.075
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<0.075	<0.075	<0.074	<0.076
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<0.078	<0.079	<0.077	<0.079

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA

Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA

Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Laboratory data flags

J - Analyte detected below quantitation limits

Figures

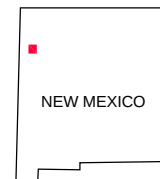
- Figure 1 Site Location Map**
 - Figure 2 Aerial Photo of Tank Storage Area**
 - Figure 3 Extent of Release**
 - Figure 4 Soil Sampling Locations**
-
-



Aerial Source: Google Maps, 03/18/2016



0 250
SCALE IN FEET



QUADRANGLE LOCATION



PROJ. NO.: Western Refining | DATE: 08/12/16 | FILE: WestRef-dA64

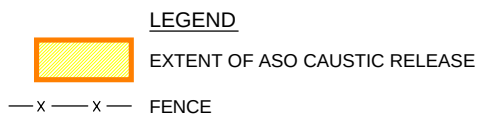
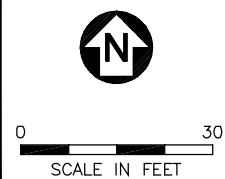
FIGURE 2
AERIAL PHOTO OF
PORTABLE TANK STORAGE AREA



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016



PROJ. NO.:Western Refining DATE:08/12/16 FILE:WestRef-dA65

FIGURE 3
EXTENT OF ASO CAUSTIC RELEASE
BAKER TANK
PORTABLE TANK STORAGE AREA





Aerial Source: Google Maps, 03/18/2016



PROJ. NO.: Western Refining | DATE: 08/12/16 | FILE: WestRef-dA66

FIGURE 4
SOIL SAMPLING LOCATIONS
BAKER TANK
PORTABLE TANK STORAGE AREA



Appendix A

Photographs of Portable Tank Storage Area



08/11/2016 10:14



08/11/2016 10:14



08/11/2016 10:14



08/11/2016 10:15



08/11/2016 10:15



SFVP
8217
FLOAT

SV3
0541
K.O.D.

SV2
8247
KOLCAUSTIC

344328

08/11/2016 10:15



08/11/2016 10:16

Appendix G

Field Methods

Appendix G

Field Methods

The following procedures are to be followed during sampling collection:

The soil sampling kit (Method 5035) for Volatile Organics Analysis (8260, 8021, & 8015) are to be used and consist of the following components:

- 1) **Methanol Kit** - One labelled paper envelope that contains two vials preserved with methanol and a plastic syringe.
- 2) **Sodium Bisulfate Kit** - One labelled quart sealable bag that contains two 40-ml VOA vials preserved with sodium bisulfate and placed in bubble wrap sleeve. A plastic syringe is also included.
- 3) **One 8-oz glass jar.**

Sampling procedures included:

Methanol Kit – Using new gloves take the syringe and collect 10 CCs of soil and extrude into one of the vials. Collect and extrude 10 CCs into the second vial and place both vials in the paper envelope. Seal the envelope flap with clear tape. Fill out the label with the date and time the sample was collected and the sampler's name/initials. The project location should be included on the label. All labels will be completed with waterproof ink and covered with clear tape. Place the paper envelope in a quart sealable bag. Place the quart bag in a gallon sealable bag.

Sodium Bisulfate Kit – Using new gloves, if necessary, take the syringe and collect 4 CCs of soil and extrude into one of the vials. Collect and extrude 4 CCs into the second vial and place both vials in the bubble wrap and then in the quart sealable bag. Fill out the label on the quart sealable bag and cover with clear tape. Place in the gallon sealable bag.

8-oz Jar/Teflon Lined Lid - Using new gloves, if necessary, and a clean trowel or sampling knife, fill the 8-oz jar completely with soil and seal with the lid. Fill out the label and cover with clear tape. Place the jar in bubble wrap and then in the gallon sealable bag.

If additional analyses such as metals or semivolatile organics are required, then an additional 8-oz jar must be collected.

The bags will be placed into a cooler filled with ice. The sampling location and sampling time will be recorded on the field log and the chain-of-custody form. All samples are to be kept on ice until delivered by hand to the laboratory.

The sample containers are to be secured in bubble wrap and then placed in new sealable bags. The bags will be placed into a cooler filled with ice packed in sealable bags. All samples are to be kept cold (at 4°C or below) and delivered by hand, transported to the laboratory.

Appendix H
Soil Sampling Logs
June 14, 2016

Project Name	Boring Number	Sample Date	Sample Time	Logged and Sampled By:
TANK 714	T-714-1	6.14.16	1310	TRACY PAYNE

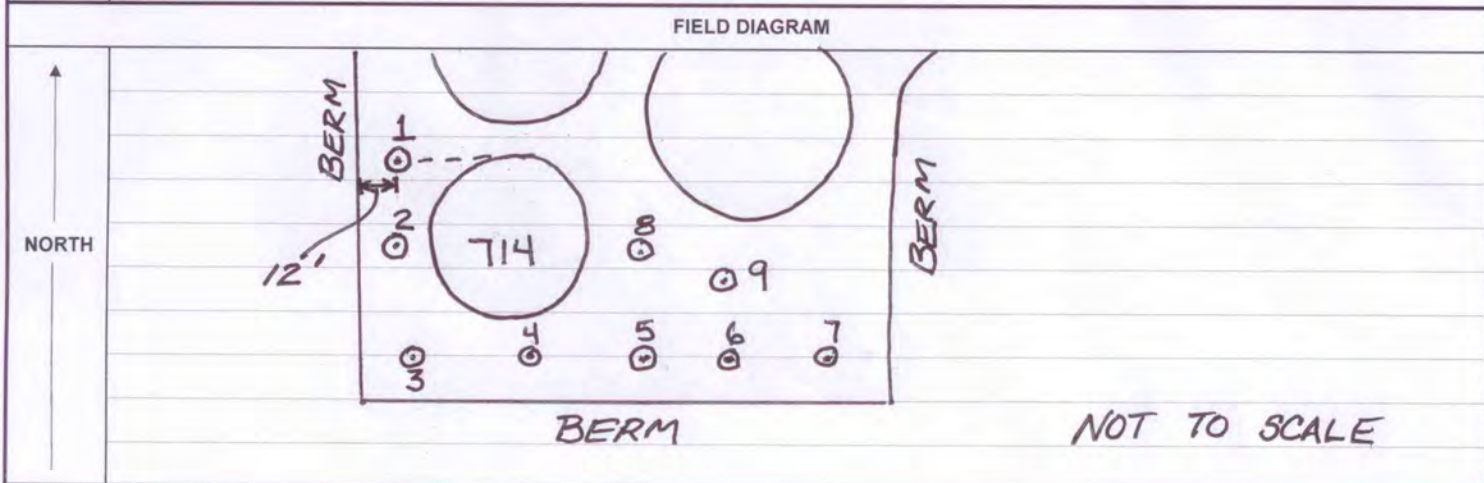
Total Depth	GPS Coordinates
6"	N35° 29.180' W108° 25.499'

Current Precipitation	Estimated Wind Speed:	Temperature	Clear? ☒	Cloudy? ☐
☒ None ☐ Drizzle ☐ Light ☐ Moderate ☐ Heavy ☐ Continuous ☐ Intermittent	☒ Slight ☐ Moderate ☐ Strong ☐ Very Strong	73°		

Comments
USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible]

NO.	PHOTO LOG - DESCRIPTION
	NO PHOTOS



Project Name	Boring Number	Sample Date	Sample Time	Logged and Sampled By:
TANK 714	T-714-2	6.14.16	1325	TRACY PAYNE

Current Precipitation							Estimated Wind Speed:			
None	Drizzle	Light	Moderate	Heavy	Continuous	Intermittent	Slight	Moderate	Strong	Very Strong

Temperature	<u>Clear?</u> / Cloudy?
74°	

Comments
USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible][illegible]

A hand-drawn site plan on lined paper. On the left, a vertical line is labeled "BERM". To the left of the berm is a north arrow pointing upwards, labeled "NORTH". To the right of the berm, a point is marked with a circle and the number "2". A horizontal line segment with an arrow pointing left towards the berm is labeled "10'". A diagonal line segment with an arrow pointing towards the curved boundary is labeled "20'". The curved boundary is labeled "714". At the bottom right, the text "NOT TO SCALE" is written.

Project Name TANK 714	Boring Number T-714-3	Sample Date 6.14.16	Sample Time 1345	Logged and Sampled By: TRACY PAYNE
---------------------------------	---------------------------------	-------------------------------	----------------------------	--

Temperature	<u>Clear?</u>	Cloudy?
75°		

USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible]

Hand-drawn site plan of a berm. A vertical line on the left is labeled "BERM" vertically. A horizontal line at the bottom is labeled "BERM". A point is marked with a circle and a dot, labeled "3". A horizontal dimension line from the vertical berm to point 3 is labeled "9'". A vertical dimension line from the horizontal berm to point 3 is labeled "18'". A curved line at the top is labeled "714". A north arrow is on the far left. The text "NOT TO SCALE" is at the bottom right.

Project Name	Boring Number	Sample Date	Sample Time	Logged and Sampled By:
TANK 714	T-714-4	6.14.16	1400	TRACY PAYNE

Current Precipitation	Estimated Wind Speed:	Temperature
☒ None ☐ Drizzle ☐ Light ☐ Moderate ☐ Heavy ☐ Continuous ☐ Intermittent	Slight ☒ Moderate ☐ Strong ☐ Very Strong	Clear? / Cloudy? 75°

[illegible]

NO.	PHOTO LOG - DESCRIPTION
	NO PHOTOS

Hand-drawn diagram of a well. A vertical line represents the well. The water table is a curve above the well. The distance from the water table to the well opening is 24'. The distance from the well opening to the bottom of the well is 18'. The total depth of the well is 42'. The water level in the well is 4 feet below the water table. The diagram is labeled "NOT TO SCALE".

Project Name TANK 714		Boring Number T-714-5	Sample Date 6.14.16	Sample Time 1415	Logged and Sampled By: TRACY PAYNE
Total Depth 6"	GPS Coordinates N 35° 29.165' W 108° 25.478'				
Current Precipitation None Drizzle Light Moderate Heavy Continuous Intermittent			Estimated Wind Speed: Slight Moderate Strong Very Strong		Temperature 75° ☒ Clear? ☐ Cloudy?

Comments
USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible]

NO.	PHOTO LOG - DESCRIPTION
	NO PHOTOS

Hand-drawn site plan of a proposed water treatment facility. The plan shows a rectangular layout with a 'BERM' on the left and bottom. A circular feature labeled '714' is located near the top left. A 'PIPING' line runs vertically from the top center. A horizontal line with a central circle and crosshair is located near the bottom center, with dimensions '125'' and '15'' indicated. A curved line is on the right side. A north arrow is on the far left.

Project Name TANK 714		Boring Number T-714-6	Sample Date 6.14.16	Sample Time 1430	Logged and Sampled By: TRACY PAYNE
Total Depth 0"	GPS Coordinates N35° 29.165' W108° 25.469'				
Current Precipitation None Drizzle Light Moderate Heavy Continuous Intermittent			Estimated Wind Speed: Slight Moderate Strong Very Strong		Temperature 75° ☒ Clear? ☐ Cloudy?

Comments

USED HAND AUGER TO COLLECT SOIL SAMPLE

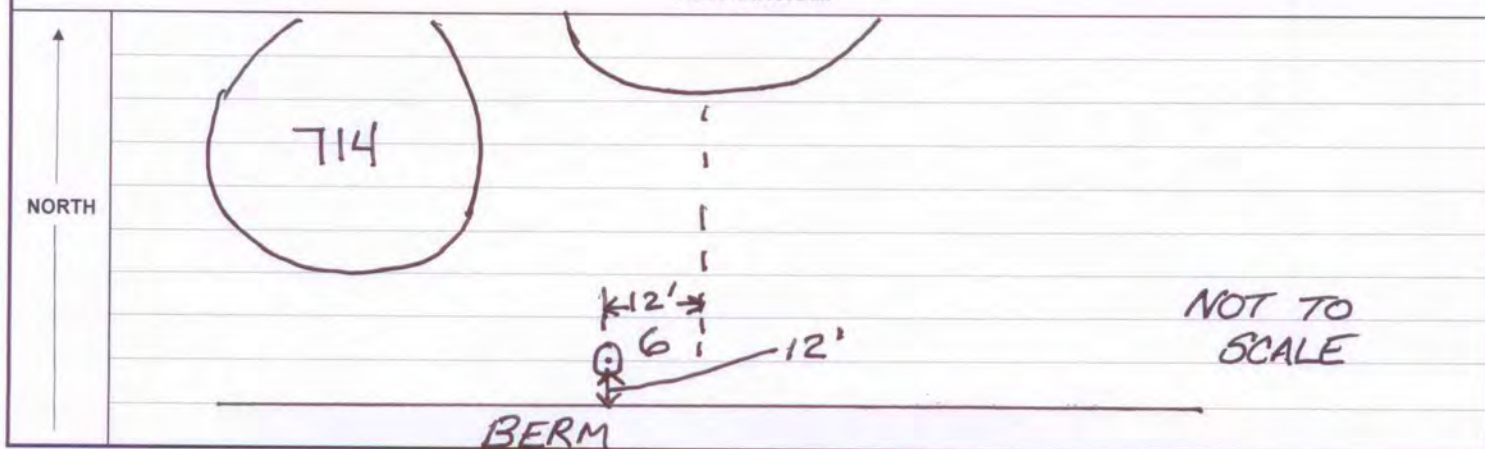
[illegible]

NO.

PHOTO LOG - DESCRIPTION

NO PHOTOS

FIELD DIAGRAM



Project Name	Boring Number	Sample Date	Sample Time	Logged and Sampled By:
TANK 714	T-714-7	6.14.16	1445	TRACY PAYNE

Current Precipitation	Estimated Wind Speed:	Temperature	Clear?	Cloudy?
None Drizzle Light Moderate Heavy Continuous Intermittent	Slight Moderate Strong Very Strong	79°		

Comments
USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible][illegible]

[illegible]

Project Name TANK 714		Boring Number T-714-9	Sample Date 6.14.16	Sample Time 1515	Logged and Sampled By: TRACY PAYNE
Total Depth	GPS Coordinates				

Total Depth	GPS Coordinates	1-14-7	6-14-16
0-6"	N 35° 29.171'	W 108° 25.467'	
Current Proclamation			

Current Precipitation
☒ None ☐ Drizzle ☐ Light ☐ Moderate ☐ Heavy ☐ Continuous ☐ Intermittent

Estimated Wind Speed: Slight Moderate Strong Very Strong

Temperature	<u>Clear?</u>	Cloudy?
-------------	---------------	---------

Comments

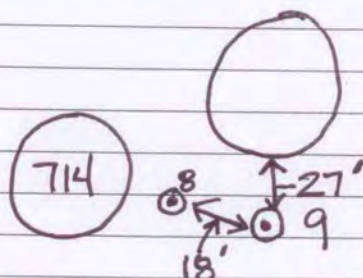
USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible]

NO.

PHOTO LOG - DESCRIPTION

FIELD DIAGRAM



NOT TO SCALE

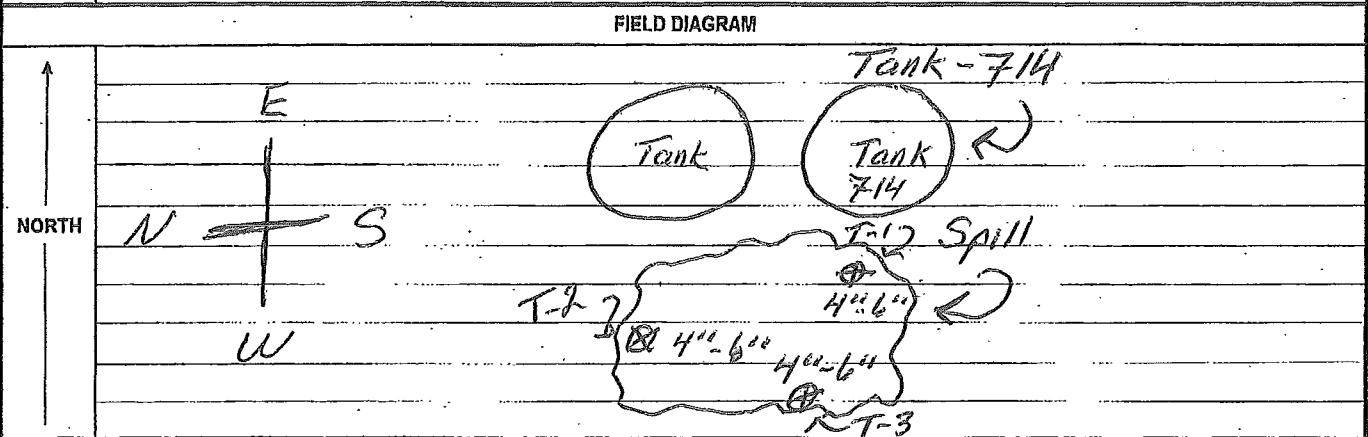
Western Refining SW, Inc. - Gallup Refinery

Project Name <i>Tank 714 - Spill Confirmation</i>		Boring Number <i>T-1/T-2/T-3</i>	Sample Date	Sample Time <i>10:00 AM</i>	Logged and Sampled By: <i>Kenny (ACT)</i>
Total Depth <i>4'0" - 6'0"</i>	GPS Coordinates <i>N/A</i>				
Current Precipitation ☒ None ☐ Drizzle ☐ Light ☐ Moderate ☐ Heavy ☐ Continuous ☐ Intermittent			Estimated Wind Speed: ☒ Slight ☐ Moderate ☐ Strong ☐ Very Strong		Temperature <i>85</i> ☒ Clear? ☐ Cloudy?

Comments
Soil is dry

PID Readings		Sample Disposition			Lithologic Interval (feet bgl)	Symbol	% Recovery	Description of Lithology / Sediments
Interval (feet)	Results (ppm)	Sample Depth (feet bgl)	Sample Type	No. & Container Type				
<i>0'6"</i>		<i>0'6"</i>		<i>3</i>				<i>Soil</i>
				<i>2</i>				
				<i>2</i>				
				<i>3</i>				
				<i>2</i>				
				<i>2</i>				
				<i>3</i>				
				<i>2</i>				
				<i>2</i>				

NO.	PHOTO LOG - DESCRIPTION



[illegible]



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66562**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-262-1749I.D. No. NM D000333221

PROFILE APPROVAL NO.										WASTE DESCRIPTION										QUANTITY				UNITS																	
P		D		I						4		4		2		1		2		8		A		Z		Solidified FCC Feed										18				T	

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-03-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John Gervin CtiPhone No. 570-780-6188

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gervin3-3-16John Gervin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name ABEL TAFOLAVehicle's No. 891/9925/BIN 41188

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-3-16Abel Tafola

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Polly Weatherford3/4/16Polly Weatherford

NAME (PRINT)

DATE

SIGNATURE



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.
**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY
Customer Accl. No. _____
Ticket No. _____

GENERATOR

WM- 66648

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 32

I-40 @ Exit 32

Jamestown, NM 87347

Jamestown, NM 87347

Phone No. 505-882-1748

I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
			13.69	B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen 4/7/16
AUTHORIZED AGENT'S NAME (PRINT) DATE

[Signature]
SIGNATURE

CONTRACTOR

Name John Girvin

Phone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)

04-07-16
DATE

[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INC

Phone No. 480-784-4833

Address 1845 E. JACKSON STREET

Driver's Name Abel TADORA

PHOENIX, AZ 85034

Vehicle's No. 891/9500 / B114 / 1100

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-07-16
SHIPMENT DATE

Abel Tadora
DRIVER'S SIGNATURE

4/8/16
DELIVERY DATE

Abel Tadora
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)

4/8/16
DATE

[Signature]
SIGNATURE



Patented Invention (and) L.L.
 5000 N. Harbor
 Joseph City, AZ, 86402
 Ph: 928-266-2665

Original
 Ticket 170130

Customer Name CHRYSLER FINANCIAL CORPORATION Credit Carrier (1) (1)
 Ticket Date 04/08/2016 Vehicle 031
 Payment Type Credit Account Container
 Manual Transfer Driver
 Handling Ticket# Charge
 Route
 State Waste Code
 Manifest Code
 Destination
 Profile 4422002 (00000000) FOC F200
 Generator 100-WESTERN REFINING SOUTHWEST GALLUP

In	Time	Scale	Generator	Inbound	Gross	
04/08/2016 08:02:33	08:02:33	Scale	ghunt		Yare	65980
04/08/2016 08:02:33	08:02:33		ghunt		Net	38600
					Tare	27380
					Tare	13.6

Product	LBX	Qty	Unit	Rate	Tax	Amount	Origin
1 Cont Cont Sp. W.-T	100	13.69	Tons				PH
2 RCN-P-Regulatory C	100		%				PH
3 PEE-P-Post Surcharge	100		%				PH
4 EPE-P-Standard Env	100		%				PH
5 ADE-DEED Fee	100	13.69	Tons				PH

Total Tax
 Total Ticket

Driver's Signature

[Signature]



Painted Desert Landfill 10#
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170104

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/31/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66635 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/31/2016 14:27:46	Scale1	paty		Tare	64960 11
Out	03/31/2016 14:27:46		paty		Net	38600 11
					Tons	25360 11
						13.1

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	13.18	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	13.18	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66635**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD 000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**

PDL	4	4	2	1	2	8	A	Z
-----	---	---	---	---	---	---	---	---

Solidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DOISEY

AUTHORIZED AGENT'S NAME (PRINT)

03-31-16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-31-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafuyaVehicle's No. 891/9925 / Bin #1038

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-31-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/31/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]

NAME (PRINT)

3/31/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170075

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/31/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66632
Destination Grid
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/31/2016 07:16:40	Scale1	paty		Tare	71360 lb
Out	03/31/2016 07:16:40		paty		Net	38600 lb
					Tons	32960 lb
						16.48

Comments

Product	LDX	Qty	UCM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.48	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	16.48	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66632

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. XMD 000 333 221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL	442128AZ	Solidified FCC Feed	18	T	D - DRUM
					B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

03-30-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-30-16

DATE

John Girvin

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TAFORAPHOENIX, AZ 85034Vehicle's No. 891 / 9925 / Bin # 1092

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3/31/16

SHIPMENT DATE

Abel Tafari

DRIVER'S SIGNATURE

3/31/16

DELIVERY DATE

Abel Tafari

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherhead

NAME (PRINT)

3/31/16

DATE

Patty Weatherhead

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170065

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/30/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66631
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/30/2016 14:07:57	Scale1	paty		Tare	72780 1
Out	03/30/2016 14:07:57		paty		Net	38600 1
					Tons	34180 1
						17.0

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.09	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADE0 Fee	100	17.09	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66631**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM5000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT****PDL** 442128AZSolidified FCC Feed18T17.09D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-30-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-30-16John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TAFOYAVehicle's No. 891/9925/BIN # 999

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3/30/16

SHIPMENT DATE

Abel Tafoya

DRIVER'S SIGNATURE

3/30/16

DELIVERY DATE

Abel Tafoya

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/30/16

DATE

Gary Hunt

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170038

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/30/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66629
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	66600 lb
In	03/30/2016 07:14:46	Scale1	paty		Tare	38600 lb
Out	03/30/2016 07:14:46		paty		Net	28000 lb
					Tons	14.00

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.00	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	14.00	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66629

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
P D L 4 4 2 1 2 8 A Z		Solidified FCC Feed	18	T	D - DRUM
					B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-29-16AD

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-29-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TafuyaPHOENIX, AZ 85034Vehicle's No. 891/9925/BIN#1188

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-29-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/3/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Ruby Weatherford3/30/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170031

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/29/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 56626
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/29/2016 14:46:28	Scaled	paty		Tare	65840 lb
Out	03/29/2016 14:46:28		paty		Net	37400 lb
					Tons	28440 lb
Comments						14.22

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.22	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	14.22	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66626**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM Δ 000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 4 4 2 1 2 8 A Z	Solidified FCC Feed	18	T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/29/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GravinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gravin
AUTHORIZED AGENT'S NAME (PRINT)03-29-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TafolaPHOENIX, AZ 85034Vehicle's No. 891/9925 / Bin # 941

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-29-16
SHIPMENT DATE3/29/16
DRIVER'S SIGNATURE3/29/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford
NAME (PRINT)3/29/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169990

Customer Name CHEMICALTRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/29/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66625 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

Time Scale Operator Inbound Gross
In 03/29/2016 07:04:10 Scale1 paty 38600 1
Out 03/29/2016 07:04:10 paty Net 31300 1
Tons 15.6
Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		15.69	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surchang 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		15.69	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66625**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT****PDL** 442128AZSolidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen

AUTHORIZED AGENT'S NAME (PRINT)

3/28/16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-28-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INC480-784-4833Address 1945 E. JACKSON STREET

Phone No. _____

PHOENIX, AZ 85034Driver's Name ABET FAFOKAVehicle's No. 891/9925/BIN # 1244

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-28-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/29/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/29/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-289-3605

Original
Ticket# 169979

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/28/2015 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 65622
Destination Grid
PG
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	72160 lb
In	03/28/2015 10:12:45	Scale1	paty		Tare	38600 lb
Out	03/28/2015 10:12:45		paty		Net	33560 lb
					Tons	16.78

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.78	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.78	Tons				NM

Total Tax
Total Ticket

Driver's Signature



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66622**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>16.78/T</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-28-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-28-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name ABE/ TAFOYAPHOENIX, AZ 85034Vehicle's No. 891/9925/Bin #996

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-28-16 [Signature]

SHIPMENT DATE

DRIVER'S SIGNATURE

3/28/16 [Signature]

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Kathy Weatherston

NAME (PRINT)

3/28/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170098

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/31/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66636
Destination Brid
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/31/2016 13:11:31	Scale1	paty		Tare	63740 lb
Out	03/31/2016 13:11:31		paty		Net	38200 lb
					Tons	25540 lb
						12.77

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	12.77	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	12.77	Tons				NM

Total Tax
Total Ticket

Driver's Signature

CARLO F MONSIEVAIS



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66636**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

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ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-31-16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-31-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name CARLO F. MONSIEVAISPHOENIX, AZ 85034Vehicle's No. 884 / 9000 / BINS # 906

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-31-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3-31-16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

[Signature]

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Tadly Weatherford

NAME (PRINT)

3/31/16

DATE

[Signature]

SIGNATURE



PAINTED DESERT LANDFILL
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170078

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/31/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66634
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/31/2016 07:36:07	Scale1	paty			51800 lb
Out	03/31/2016 07:36:07		paty		Tare	38200 lb
					Net	13600 lb
					Tons	6.00

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		6.00	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		6.00	Tons				NM

Total Tax
Total Ticket

Driver's Signature

CARLO MONSISUAZS #8411





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66634**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMDS000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	_____	_____	_____	
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	_____	_____	_____	

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DOISEY03-30-16Alvin Doisey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-30-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name CARLO F. MONSISVAISPHOENIX, AZ 85034Vehicle's No. 884/9000 / Bin # 952

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-30-16[Signature]

SHIPMENT DATE

DRIVER'S SIGNATURE

3-31-16

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/31/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170060

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/30/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66630
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/30/2016 12:44:44	Scale1	ghunt		Tare	59200 lb
Out	03/30/2016 12:44:44		ghunt		Net	38200 lb
					Tons	21000 lb
						10.50

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	10.50	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	10.50	Tons				NM

Total Tax
Total Ticket

Driver's Signature

CALCULATED 250425
8411



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66630**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM0000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T 10.50T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-30-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-30-16John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Carlo F MONSISVAISPHOENIX, AZ 85034Vehicle's No. 884/9000/Bmw # 960

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable State law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-30-16[Signature]

SHIPMENT DATE

DRIVER'S SIGNATURE

3-30-16

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT3/30/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill 10#
9001 N. Porter
Joseph City, AZ, 85032
Ph: 928-288-3605

Original
Ticket# 170283

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 04/07/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66647
Destination Grid
PD
Profile 44212AAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/07/2016 13:46:54	Scale1	ghunt		Tare	59920 lb
Out	04/07/2016 13:46:54		ghunt		Net	38600 lb
					Tons	21320 lb
						10.66

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	10.66	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	10.66	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66647

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
P D L	4 4 2 1 2 8 A Z	Solidified FCC Feed	18	T 10.66	D - DRUM
					B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)4-7-16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)04-07-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafuyaVehicle's No. 891/9500/Bin # 1174

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-07-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE4/7/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)4/7/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
5801 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170253

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 04/07/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66646
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/07/2016 07:12:20	Scales	ghunt		Tare	71520 lb
Out	04/07/2016 07:12:20		ghunt		Net	38600 lb
					Tons	32920 lb
						16.46

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Original
1 Cont Soil Sp. W.-T 100		16.46	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEE Fee 100		16.46	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66646**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000 333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	B - BAG
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	C - CARTON
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	T - TONS
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	Y - YARDS
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)4/6/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)04-06-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TafuyaPHOENIX, AZ 85034Vehicle's No. 89L19500 / BIN # 1085

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-06-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE4/7/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Garry Hunt
NAME (PRINT)4/7/16
DATE[Signature]
SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Ticket# 170245

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI ETI
Ticket Date 04/06/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66645
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/06/2016 14:41:12	Scale1	paty		Tare	68840 lb
Out	04/06/2016 14:41:12		paty		Net	38600 lb
					Tons	30240 lb
						15.12

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.12	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.12	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66645**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ		Solidified FCC Feed	18	T	D - DRUM
					B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)4/6/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)04-06-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafoyaVehicle's No. 891 / 1500 / Bin # 1203

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-06-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE4/6/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford
NAME (PRINT)4/6/16
DATE[Signature]
SIGNATURE



PAINTED DESERT LANDFILL
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170227

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 04/06/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66644
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/06/2016 08:41:48	Scale1	paty		Tare	69980 lb
Out	04/06/2016 08:41:48		paty		Net	38600 lb
					Tons	31380 lb
						15.65

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		15.69	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		15.69	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66644**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL 442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

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ALVIN DORSEY04-06-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin04-06-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER**CHEMICAL TRANSPORTATION, INC****480-784-4833**Name 1945 E. JACKSON STREET

Phone No. _____

Address PHOENIX, AZ 85034Driver's Name ABEL TAFOLAVehicle's No. 891/9500/BW #983

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-06-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE4/6/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford4/6/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

04/05/2016
Ticket# 170212

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 04/05/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66643
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/05/2016 15:20:31	Scale1	paty		Tare	63400 lb
Out	04/05/2016 15:20:31		paty		Net	38600 lb
					Tons	24800 lb
						12.40

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	12.40	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	12.40	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66643**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	
<u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	

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Beck Larsen

AUTHORIZED AGENT'S NAME (PRINT)

4/5/16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GivvinPhone No. 570 780 6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Givvin

AUTHORIZED AGENT'S NAME (PRINT)

04-05-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name ABEL TAFOLAAddress PHOENIX, AZ 85034Vehicle's No. 891 / 9500 / Bin # 989

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-05-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

4/5/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

4/5/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170182

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 04/05/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0020415
State Waste Code Gen EPA ID
Manifest 66642
Destination Grid
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/05/2016 10:08:34	Scale1	paty		Tare	60440 lb
Out	04/05/2016 10:08:34		paty		Net	38600 lb
					Tons	21840 lb
Comments						10.92

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	10.92	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EYF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	10.92	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66642

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.

WASTE DESCRIPTION

QUANTITY

UNITS

UNIT

PDL 442128AZ

Solidified FCC Feed

18 T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY04-05-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin04-05-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TafoyaPHOENIX, AZ 85034Vehicle's No. 891/9500/Bw #1198

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-05-16

SHIPMENT DATE

Abel Tafoya

DRIVER'S SIGNATURE

4/5/16

DELIVERY DATE

Abel Tafoya

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

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Patty Weatherford

NAME (PRINT)

4/5/16

DATE

Patty Weatherford

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169282

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/01/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66502
Destination Grid
PO
Profile 44212AAZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSMBALLUP WESTERN REFINING SOUTHWEST BALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/01/2016 09:39:05	Scale1	paty		Tare	66220.16
Out	03/01/2016 09:39:05		paty		Net	38500.16
Comments					Tons	27620.16
						13.81

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	13.81	Tons				NM
2 RCR-P-Regulatory C	100		%				
3 FUEL-Fuel Surcharg	100		%				
4 EVF-P-Standard Env	100		%				
5 ADE-ADED Fee	100	13.81	Tons				

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

FOR OFFICE USE ONLY

**NON-HAZARDOUS
WASTE MANIFEST**

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66602**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-362-1740I.D. No. NM D000333211

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	18	T
		13.81/T	

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

07-29-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GivinsPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givins

AUTHORIZED AGENT'S NAME (PRINT)

7-29-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TatorPHOENIX, AZ 85034Vehicle's No. 891/9925 / BIN # 1050

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

2-29-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/1/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Polyweatherford

NAME (PRINT)

3/1/16

DATE

[Signature]

SIGNATURE

111-005 / AZ ORIGINAL - WHITE DISPOSAL FACILITY - YELLOW TRANSPORTER - PINK GENERATOR - GOLDENROD



PAINTED DESERT LANDFILL
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169262

Customer Name CHEMICAL TRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 02/29/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66603 Grid
Destination
PU
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

Time	Scale	Operator	Inbound	Gross	
02/29/2016 15:25:56	Scale1	paty		Tare	66120 lb
02/29/2016 15:25:56		paty		Net	39600 lb
				Tons	27520 lb
					13.76

	LD%	Qty	UDM	Rate	Tax	Amount	Origin
State Sp. W.-T 100		13.76	Tons				NM
RR-R Regulatory C 100			%				NM
FUEL-Fuel Surcharg 100			%				NM
RR-R Standard Env 100			%				NM
5 ADE-ADE Fee 100		13.76	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66603

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30

I-40 @ Exit 30

Jamestown, NM 87347

Jamestown, NM 87347

Phone No. 505-862-1740

I.D. No. NM2000333211

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 4 1 2 1 2 3 A Z	Solidified FCC Feed	18	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY
AUTHORIZED AGENT'S NAME (PRINT)

02-29-16
DATE

Alvin D
SIGNATURE

CONTRACTOR

Name John Givins CTI

Phone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

[Signature]
AUTHORIZED AGENT'S NAME (PRINT)

02-29-16
DATE

John Givins
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INC

Phone No. 480-784-4833

Address 1945 E. JACKSON STREET

PHOENIX, AZ 85034

Driver's Name ARIEL TAFORA

Vehicle's No. 891/9925 Bin # 983

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

02-29-16
SHIPMENT DATE

[Signature]
DRIVER'S SIGNATURE

02-29-16
DELIVERY DATE

[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Ruby Weathers
NAME (PRINT)

2/29/16
DATE

[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170137

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 04/01/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66640
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWBALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/01/2016 12:19:36	Scale1	ghunt		Tare	64820 lb
Out	04/01/2016 12:19:36		ghunt		Net	37400 lb
					Tons	27420 lb
Comments	REPLACEMENT TICKET FOR TICKET # 170133					13.71

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	13.71	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	13.71	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66640**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM1000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>

UNIT

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

04-01-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

04-01-16

DATE

John Girvin

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TAFOLAVehicle's No. 820/9925/ Bmw #845

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

04-01-16

SHIPMENT DATE

Abel Tafola

DRIVER'S SIGNATURE

4/1/16

DELIVERY DATE

Abel Tafola

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Peggy Weather

NAME (PRINT)

4/1/16

DATE

Peggy Weather

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170110

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 04/01/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66637
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	04/01/2016 07:12:24	Scale1	paty		Tare	72540 1
Out	04/01/2016 07:12:24		paty		Net	38600 1
					Tons	33940 1
						18.5

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.97	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	16.97	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66637**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>44212BAZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN Dasey
AUTHORIZED AGENT'S NAME (PRINT)03-31-16
DATEAlvin Dasey
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-31-16
DATEJohn Girvin
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TafolyaPHOENIX, AZ 85034Vehicle's No. 920/9925/ Bin # 1069

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-31-16
SHIPMENT DATEAbel Tafolya
DRIVER'S SIGNATURE4/1/16
DELIVERY DATEAbel Tafolya
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Dale Weatherford
NAME (PRINT)4/1/16
DATEDale Weatherford
SIGNATURE

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		Page 1 of 1	
FCCFEED-015		1					
Generator's Name and Mailing Address							
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID			
Chemical Transport, Inc		AZT050010008		006648			
Transporter 2 Company Name		US EPA ID Number		Transporter 1 Phone		480-784-4833	
				State Transporter's ID			
				Transporter 2 Phone			
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				SWM-051740(SP)			
Facility's Phone				(505) 905-8402			
WASTE DESCRIPTION		No.	Containers Type	Total Quantity	Unit		
FCC Tank 714 Overflow - Cleanup		1	CM	16	Y		
Additional Descriptions for Materials Listed Above		Bin #945		Handling Codes for Wastes Listed Above			
Profile # 3475-2016-A				N/A			
Special Handling Instructions and Additional Information							
Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name		Signature		Date			
Beck Larsen				02/26/16			
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date			
Abel Tatro				02/26/16			
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date			
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name		Signature		Date			

Return Copy to Environmental

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER
02	00075681		briana
DATE IN	DATE OUT	TIME IN	TIME OUT
02/26/16	02/26/16	09:52	12:18
REFERENCE		VEHICLE	ROLL OFF
		CT1	
20824245		MCKINLEY COUNTY	

Inbound - Charge ticket

Scale 1 Gross Wt. 72720 LB
Scale 1 Tare Wt. 38940 LB
Net Weight 33780 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
16.89	TON	P C S	65.000	1097.85	0.00	1097.85

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.
Comment FCCFEED-015
GPS N35.25.490 W108.06.560 EL7074

TAX 0.00
Scale Fee 0.00

NET AMOUNT
1097.85
TENDERED
CHANGE
CHECK NO.

WV6T1 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

[Signature]

307326

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		FCCFEED-013		Page 1 of 1	
Generator's Name and Mailing Address		Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID		006648			
Chemical Transport, Inc		AZT050010008		Transporter 1 Phone		480-784-4833			
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID					
				Transporter 2 Phone					
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID		SWM-051740(SP)			
NWNM Regional Solid Waste - Redrock Landfill				Facility's Phone		(505) 905-8402			
Thoreau, NM 87323									
WASTE DESCRIPTION		No.	Containers Type	Total Quantity	Unit Wt/Vol				
FCC Tank 714 Overflow - Cleanup		1	CM	16	Y				
Additional Descriptions for Materials Listed Above		BIN # 1102		Handling Codes for Wastes Listed Above					
ProFile # 3475-2016-A				N/A					
Special Handling Instructions and Additional Information		Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.									
Printed/Typed Name		Signature		Date					
ALVIN DORSEY		Alvin D		02/25/16					
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date					
ABEL TETOYA		Abel Teto		02/25/16					
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date					
Discrepancy Indication Space									
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.									
Printed/Typed Name		Signature		Date					

Return Copy to Environmental

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NET AMOUNT
1051.70
TENDERED
CHANGE
CHECK NO.

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		FCCFEED-014		Page 1 of 1	
Generator's Name and Mailing Address									
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833									
Transporter 1 Company Name				US EPA ID Number		State Transporter's ID		006648	
Chemical Transport, Inc				AZT050010008		480-784-4833			
Transporter 2 Company Name				US EPA ID Number		State Transporter's ID			
						Transporter 2 Phone			
Designated Facility Name and Site Address				US EPA ID Number		State Facility's ID			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323						SWM-051740(SP)			
						Facility's Phone		(505) 905-8402	
WASTE DESCRIPTION					No.	Containers Type	Total Quantity	Unit Wt/Vol	
FCC Tank 714 Overflow - Cleanup					1	CM	16	Y	
Additional Descriptions for Materials Listed Above					Handling Codes for Wastes Listed Above				
Bin # 996 Profile # 3475-2016-A					N/A				
Special Handling Instructions and Additional Information									
Chemtrec (800) 424-9300									
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.									
Printed/Typed Name					Signature		Date		
Beck Larsen					[Signature]		Month	Day	Year
							02	25	16
Transporter 1 Acknowledgement of Receipt of Materials					Signature		Date		
Printed/Typed Name					Signature		Month	Day	Year
Abel Tabora					[Signature]		02	25	16
Transporter 2 Acknowledgement of Receipt of Materials					Signature		Date		
Printed/Typed Name					Signature		Month	Day	Year
Discrepancy Indication Space									
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.									
Printed/Typed Name					Signature		Date		
							Month	Day	Year

Return Copy to Environmental

043

****DUPLICATE TICKET****
 101 Ford Mesa Bluffs Drive
 PO Box 30
 Thoreau, NM 87323

003475 WESTERN REFINERY
 PO BOX 62558
 PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER			
02	00075669		Joseph Kirk			
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF	
02/25/16	02/25/16	16:19	17:22	CT1		
REFERENCE			ORIGIN			
20824245			MCKINLEY COUNTY			

Inbound - Charge ticket						
Scale 1 Gross Wt.	69720	LB				
Scale 1 Tare Wt.	39020	LB				
Net Weight	30700	LB				
QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
15.35	TON	P C S	65.000	997.75	0.00	997.75

Operating hours 8AM to 4:30PM Monday thru Friday. This
 certify that this load does not contain any hazardous
 materials, medical waste or liquids of any type.
 Driver was ON/OFF vehicle during weighing.
 Comment FCCFEED-014
 GPS N35.25.490 W108.06.560 EL7074

BIN # 996

TAX	0.00
Scale Fee	0.00
NET AMOUNT	997.75
TENDERED	
CHANGE	
CHECK NO.	

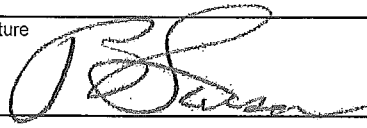
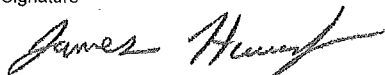
WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

[Signature]

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		Page 1 of 1	
FCCFEED-012							
Generator's Name and Mailing Address							
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID			
Chemical Transport, Inc		AZT050010008		006648			
Transporter 1 Phone				480-784-4833			
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID			
Transporter 2 Phone							
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				SWM-051740(SP)			
Facility's Phone				(505) 905-8402			
WASTE DESCRIPTION		No.	Containers Type	Total Quantity	Unit		
FCC Tank 714 Overflow - Cleanup		1	CM	16	Y		
Additional Descriptions for Materials Listed Above		Bin # 983		Handling Codes for Wastes Listed Above			
Profile # 3475-2016-A				N/A			
Special Handling Instructions and Additional Information							
Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name		Signature		Date			
Beck Larsen				02 24 16			
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date			
Printed/Typed Name		Signature		Date			
James Hawley				02 24 16			
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date			
Printed/Typed Name		Signature		Date			
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name		Signature		Date			

Return Copy to Environmental

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****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE		TICKET		GRID		WEIGHMASTER	
02		00075619				Joseph Kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
02/24/16	02/24/16	14:19	14:57	CT2			
REFERENCE				ORIGIN			
20824245				MCKINLEY COUNTY			

Scale 1 Gross Wt. LB
Scale 1 Tare Wt. LB
Net Weight LB

68320 LB
36780 LB
31540 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
15.77	TON	P C S	65.000	1025.05	0.00	1025.05

BIN # 983

BOL # FCCFEED - 012

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-012

GPS N35.25.490 W108.06.560 EL7074

TAX

0.00

Scale Fee

0.00

NET AMOUNT
1025.05
TENDERED
CHANGE
CHECK NO.

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

James H. Hagg

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		Page 1 of 1	
Generator's Name and Mailing Address		FCCFEED <i>Oil</i>					
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID			
Chemical Transport, Inc		AZT050010008		006648			
Transporter 2 Company Name		US EPA ID Number		Transporter 1 Phone		480-784-4833	
				State Transporter's ID			
Designated Facility Name and Site Address		US EPA ID Number		Transporter 2 Phone			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				State Facility's ID		SWM-051740(SP)	
				Facility's Phone		(505) 905-8402	
WASTE DESCRIPTION		No.	Containers Type	Total Quantity	Unit		
FCC Tank 714 Overflow - Cleanup		1	CM	16	Y		
Additional Descriptions for Materials Listed Above		BIN # 1244		Handling Codes for Wastes Listed Above			
Profile # 3475-2016-A				N/A			
Special Handling Instructions and Additional Information							
Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name		Signature		Date			
Beck Larsen		<i>[Signature]</i>		02 24 16			
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date			
Abel Tatova		<i>[Signature]</i>		02 24 16			
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date			
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name		Signature		Date			

Return Copy to Environmental

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101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER			
02	00075611		Joseph Kirk			
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF	
02/24/16	02/24/16	12:50	13:18	CT1		
REFERENCE			ORIGIN			
20824245			MCKINLEY COUNTY			

Inbound - Charge ticket					
Scale 1 Gross Wt.	66500	LB			
Scale 1 Tare Wt.	38800	LB			
Net Weight	27700	LB			
QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TOTAL
13.85	TON	P C S	65.000	900.25	900.25

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-011

GPS N35.25.490 W108.06.560 EL7074

Bin 1244

TAX 0.00
Scale Fee 0.00

NET AMOUNT
900.25
TENDERED
CHANGE
CHECK NO.

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE



043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD00033211		Manifest Document No.		FCCFEED 010		Page 1 of 1	
Generator's Name and Mailing Address									
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833									
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID		006648			
Chemical Transport, Inc		AZT050010008		Transporter 1 Phone		480-784-4833			
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID					
				Transporter 2 Phone					
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID		SWM-051740(SP)			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				Facility's Phone		(505) 905-8402			
WASTE DESCRIPTION		Containers		Total		Unit			
		No.		Type		Quantity		Wt/Vol	
FCC Tank 714 Overflow - Cleanup		1		CM		16		Y	
Additional Descriptions for Materials Listed Above		Bin # 754		Handling Codes for Wastes Listed Above					
Profile # 3475-2016-A				N/A					
Special Handling Instructions and Additional Information									
Chemtrec (800) 424-9300									
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.									
Printed/Typed Name		Signature		Date					
ALVIN DORSEY		Alvin Dorsey		02/24/16					
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date					
JAMES HAWLEY		James Hawley		02/24/16					
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date					
Discrepancy Indication Space									
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.									
Printed/Typed Name		Signature		Date					

Return Copy to Environmental

043

****DUPLICATE TICKET****
 101 Red Mesa Bluffs Drive
 PO Box 1330
 Thoreau, NM 87323

003475 WESTERN REFINERY
 PO BOX 62558
 PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER			
02	00075603		Joseph Kirk			
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF	
02/24/16	02/24/16	12:04	12:41	CT2		
REFERENCE			ORIGIN			
20824245			MCKINLEY COUNTY			

Inbound - Charge ticket			
Scale 1 Gross Wt.	62500	LB	
Scale 1 Tare Wt.	36760	LB	
Net Weight	25740	LB	
QTY.	UNIT	DESCRIPTION	
12.87	TON	P C S	
		Bin # 754	
		Bin # FCCFEED - 010	

Operating hours 8AM to 4:30PM Monday thru Friday. This certify that this load does not contain any hazardous materials, medical waste or liquids of any type. Driver was ON/OFF vehicle during weighing.	TAX	0.00	
Comment FCCFEED-010	Scale Fee	0.00	
GPS N35.25.490 W108.06.560 EL7074			
	NET AMOUNT	836.55	
	TENDERED		
	CHANGE		
	CHECK NO.		

James Hump

WW6T1 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

WIA
 17008

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD00033211		Manifest Document No.		Page 1 of 1	
FCCFEED-009							
Generator's Name and Mailing Address							
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (800) 424.9300 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID			
Chemical Transport, Inc		AZT05001008		006648			
Transporter 2 Company Name		US EPA ID Number		Transporter 1 Phone		480-784-4833	
				State Transporter's ID			
				Transporter 2 Phone			
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				swm-051740 (SP)			
				Facility's Phone		(505) 905-8402	
WASTE DESCRIPTION			No.	Containers Type	Total Quantity	Unit Wt/Vol	
FCC Tank 714 Overflow - Cleanup			1	CM	160	Y	
Additional Descriptions for Materials Listed Above				Handling Codes for Wastes Listed Above			
Bin # 998 Profile # 3475-2016-A Chemtrec (800) 424-9300				N/A			
Special Handling Instructions and Additional Information							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name				Signature		Date	
ALVIN DORSEY				Alvin D		02/24/16	
Transporter 1 Acknowledgement of Receipt of Materials				Signature		Date	
ABEL TATOLA				[Signature]		02/24/16	
Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date	
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name				Signature		Date	

 Facility Copy
 ENVIRONMENTAL

043

DUPLICATE TICKET

101 Red Mesa Bluffs Drive

PO Box 1330

Thoreau, NM 87323

003475 WESTERN REFINERY

PO BOX 62558

PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER			
02	00075590		Joseph Kirk			
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF	
02/24/16	02/24/16	10:35	11:07	CT1		
REFERENCE			ORIGIN			
20824245			MCKINLEY COUNTY			

Inbound - Charge ticket

Scale 1 Gross Wt. 71620 LB
Scale 1 Tare Wt. 38040 LB
Net Weight 33580 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
16.79	TON	P C S	65.000	1091.35	0.00	1091.35

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-009

GPS N35.25.490 W108.06.560 EL7074

TAX 0.00
Scale Fee 0.00

NET AMOUNT
1091.35
TENDERED
CHANGE
CHECK NO.

WWW.671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

Handwritten signature

BIN # 998

Handwritten text: 414JA

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		FCCFEED 008		Page 1 of 1	
Generator's Name and Mailing Address									
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (800) 424.9300 (505) 722-3833									
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID		006648			
Chemical Transport, Inc		AZT05001008		Transporter 1 Phone		480-784-4833			
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID					
				Transporter 2 Phone					
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID		swm-051740 (SP)			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				Facility's Phone		(505) 905-8402			
WASTE DESCRIPTION			No.	Containers	Total	Unit			
				Type	Quantity	Wt/Vol			
FCC Tank 714 Overflow - Cleanup			1	CM	16	Y			
Additional Descriptions for Materials Listed Above			BIN # 989		Handling Codes for Wastes Listed Above				
Profile # 3475-2016-A					N/A				
Special Handling Instructions and Additional Information									
Chemtrec (800) 424-9300									
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.									
Printed/Typed Name			Signature		Date				
ALVIN DORSEY			Alvin Dorsey		02/24/16				
Transporter 1 Acknowledgement of Receipt of Materials			Signature		Date				
Printed/Typed Name			Signature		Date				
JAMES HAWLEY			James Hawley		02/24/16				
Transporter 2 Acknowledgement of Receipt of Materials			Signature		Date				
Printed/Typed Name			Signature		Date				
Discrepancy Indication Space									
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.									
Printed/Typed Name			Signature		Date				

 Facility Copy
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****DUPLICATE TICKET****
 101 Red Mesa Bluffs Drive
 PO Box 1330
 Thoreau, NM 87323

003475 WESTERN REFINERY
 PO BOX 62558
 PHOENIX AZ 85082-2558

SITE		TICKET		GRID		WEIGHMASTER	
02		00075584				Joseph Kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
02/24/16	02/24/16	09:49	10:42	CT2			
REFERENCE				ORIGIN			
20824245				MCKINLEY COUNTY			

Inbound - Charge ticket

Scale 1 Gross Wt. 65400 LB
 Scale 1 Tare Wt. 37200 LB
 Net Weight 28200 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
14.10	TON	P C S	65.000	916.50	0.00	916.50

BM # 989
BOL # FCCFEED - 008

Operating hours 8AM to 4:30PM Monday thru Friday. This
 certify that this load does not contain any hazardous
 materials, medical waste or liquids of any type.
 Driver was ON/OFF vehicle during weighing.
 Comment FCCFEED-008
 GPS N35.25.490 W108.06.560 EL7074

TAX	0.00
Scale Fee	0.00
NET AMOUNT	916.50
TENDERED	
CHANGE	
CHECK NO.	

James H. Hensley
 SIGNATURE

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

VJA
13019

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD00033211		Manifest Document No.		Page 1 of 1	
FCCFEED-007							
Generator's Name and Mailing Address Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (800) 424.9300 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID			
Chemical Transport, Inc		AZT05001008		006648			
Transporter 2 Company Name		US EPA ID Number		Transporter 1 Phone		480-784-4833	
				State Transporter's ID			
				Transporter 2 Phone			
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				swm-051740 (SP)			
				Facility's Phone		(505) 905-8402	
WASTE DESCRIPTION				No.	Type	Total Quantity	Unit
FCC Tank 714 Overflow - Cleanup				1	CM	16	Y
Additional Descriptions for Materials Listed Above				Handling Codes for Wastes Listed Above			
Profile # 3475-2016-A Chemtrec (800) 424-9300				B.W #1085 N/A			
Special Handling Instructions and Additional Information Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name				Signature		Date	
ALVIN Dorsey				Alvin Dorsey		02/24/16	
Transporter 1 Acknowledgement of Receipt of Materials				Signature		Date	
Abel Tatoya				[Signature]		02/24/16	
Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date	
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name				Signature		Date	

SPECIAL WASTE MANIFEST

Generator

Transporter

Facility

A) Facility Copy
ENVIRONMENTAL

****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER
02	00075582		Joseph Kirk
DATE IN	DATE OUT	TIME IN	TIME OUT
02/24/16	02/24/16	08:49	09:14
			CT1
REFERENCE		ORIGIN	
20824245		MCKINLEY COUNTY	

Inbound - Charge ticket

Scale 1 Gross Wt. LB
Scale 1 Tare Wt. LB
Net Weight LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
13.95	TON	P C S	65.000	906.75	0.00	906.75

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.

Driver was ON/OFF vehicle during weighing.
Comment FCCFEED-007
GPS N35.25.490 W108.06.560 EL7074

TAX 0.00
Scale Fee 0.00

NET AMOUNT
906.75
TENDERED
CHANGE
CHECK NO.

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

Handwritten signature

Bin 1085

045

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD00033211		Manifest Document No.		Page 1 of	
				FCCFEED006		1	
Generator's Name and Mailing Address							
Western Refining-Southwest (Gallup Refinery)							
92 Giant Crossing Rd							
Gallup, NM 87301							
(800) 424.9300 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID			
Chemical Transport, Inc		AZT05001008		006648			
Transporter 2 Company Name		US EPA ID Number		Transporter 1 Phone		480-784-4833	
				State Transporter's ID			
				Transporter 2 Phone			
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID			
NWNM Regional Solid Waste - Redrock Landfill				swm-051740 (SP)			
101 Red Mesa Bluff Dr.				Facility's Phone			
Thoreau, NM 87323				(505) 905-8402			
WASTE DESCRIPTION		No.	Containers	Total	Unit		
			Type	Quantity	Wt/Vol		
FCC Tank 714 Overflow - Cleanup		1	CM	16	Y		
Additional Descriptions for Materials Listed Above		BIN # 1069		Handling Codes for Wastes Listed Above			
Profile # 3475-2016-A				N/A			
Special Handling Instructions and Additional Information							
Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name		Signature		Date			
ALVIN DORSEY		Alvin Dorsey		02 23 16			
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date			
Printed/Typed Name		Signature		Date			
JAMES HAWLEY		James Hawley		02 23 16			
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date			
Printed/Typed Name		Signature		Date			
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name		Signature		Date			

A) Facility Copy
ENVIRONMENTAL

043

SPECIAL WASTE MANIFEST Generator

Transporter

Fac.

****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE		TICKET		GRD		WEIGHMASTER	
02		00075578				Joseph Kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
02/24/16	02/24/16	07:40	08:24	CT2			
REFERENCE				ORIGIN			
20824245				MCKINLEY COUNTY			

Inbound - Charge ticket

Scale 1 Gross Wt.	63860	LB
Scale 1 Tare Wt.	36860	LB
Net Weight	27000	LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
13.50	TON	P C S	65.000	877.50	0.00	877.50
		Bm # 1009				
		BAL # FCC FEED - 006				

Operating hours 8AM to 4:30PM Monday thru Friday. This

certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-006

GPS N35.25.490 W108.06.560 EL7074

NET AMOUNT	877.50
TENDERED	
CHANGE	
CHECK NO.	

James Howard
SIGNATURE

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 759-6767

11VJA

11709

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		FCCFEED-005		Page 1 of 1	
Generator's Name and Mailing Address									
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (800) 424.9300 (505) 722-3833									
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID		006648			
Chemical Transport, Inc		AZT05001008		Transporter 1 Phone		480-784-4833			
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID					
				Transporter 2 Phone					
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID		swm-051740 (SP)			
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				Facility's Phone		(505) 905-8402			
WASTE DESCRIPTION				Containers		Total		Unit	
				No.		Quantity		Wt/Vol	
FCC Tank 714 Overflow - Cleanup				1		CM		16 Y	
Additional Descriptions for Materials Listed Above				Handling Codes for Wastes Listed Above					
Profile #3475-2016-A Bin # 845				N/A					
Special Handling Instructions and Additional Information									
Chemtrec (800) 424-9300									
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.									
Printed/Typed Name				Signature		Date			
ALVIN DORSEY				Alvin Dorsey		02/23/16			
Transporter 1 Acknowledgement of Receipt of Materials				Signature		Date			
Printed/Typed Name				Signature		Date			
ABEL TOTO				Abel Toto		02/23/16			
Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date			
Printed/Typed Name				Signature		Date			
Discrepancy Indication Space									
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.									
Printed/Typed Name				Signature		Date			

N) Facility Copy

ENVIRONMENTAL

****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE	TICKET	GRID	WEIGHMASTER
02	00075577		Joseph Kirk
DATE IN	DATE OUT	TIME IN	TIME OUT
02/23/16	02/23/16	16:43	17:08
			CT1
			ROLL OFF
REFERENCE		ORIGIN	
20824245		MCKINLEY COUNTY	

Inbound - Charge ticket

Scale 1 Gross Wt. LB
Scale 1 Tare Wt. LB
Net Weight LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
14.06	TON	P C S	65.000	913.90	0.00	913.90

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-005

GPS N35.25.490 W108.06.560 EL7074

TAX 0.00
Scale Fee 0.00

NET AMOUNT
913.90
TENDERED
CHANGE
CHECK NO.

WV671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

[Handwritten Signature]

BIN 845

043

SPECIAL WASTE MANIFEST

SPECIAL WASTE MANIFEST

Generator

Transporter

Facility

Generators US EPA ID No.		NMD00033211		Manifest Document No.		FCCFEED-004		Page 1 of 1		
Generator's Name and Mailing Address										
Western Refining-Southwest (Gallup Refinery)										
92 Giant Crossing Rd										
Gallup, NM 87301										
(800) 424-9300 (505) 722-3833										
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID		006648				
Chemical Transport, Inc		AZT05001008		Transporter 1 Phone		480-784-4833				
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID						
				Transporter 2 Phone						
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID						
NWNM Regional Solid Waste - Redrock Landfill				swm-051740 (SP)						
101 Red Mesa Bluff Dr.				Facility's Phone						
Thoreau, NM 87323				(505) 905-8402						
WASTE DESCRIPTION			No.	Containers Type	Total Quantity	Unit Wt/Vol				
FCC Tank 714 Overflow - Cleanup			1	CM	16	Y				
Additional Descriptions for Materials Listed Above			Bin #		Handling Codes for Wastes Listed Above					
Pro File # 3475-2016-A			1244		N/A					
Special Handling Instructions and Additional Information										
Chemtrec (800) 424-9300										
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.										
Printed/Typed Name			Signature			Date				
Beck Larsen						Month		Day		Year
02			23			16				
Transporter 1 Acknowledgement of Receipt of Materials			Signature			Date				
Printed/Typed Name			Signature			Month		Day		Year
James Stanley						02		23		16
Transporter 2 Acknowledgement of Receipt of Materials			Signature			Date				
Printed/Typed Name			Signature			Month		Day		Year
Discrepancy Indication Space										
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.										
Printed/Typed Name			Signature			Date				
						Month		Day		Year

Facility Copy

ENVIRONMENTAL

043

****DUPLICATE TICKET****
 101 Red Mesa Bluffs Drive
 PO Box 1330
 Thoreau, NM 87323

003475 WESTERN REFINERY
 PO BOX 62558
 PHOENIX AZ 85082-2558

SITE		TICKET		GRID		WEIGHMASTER	
02		00075576				Joseph Kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
02/23/16	02/23/16	15:44	16:18	CT2			
REFERENCE				ORIGIN			
20824245				MCKINLEY COUNTY			

Inbound - Charge ticket

Scale 1 Gross Wt. 66900 LB
 Scale 1 Tare Wt. 37740 LB
 Net Weight 29160 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
14.58	TON	P C S	65.000	947.70	0.00	947.70
<i>Bin # 1244</i> <i>BOL# FCCFEED - 004</i>						

Operating hours 8AM to 4:30PM Monday thru Friday. This
 certify that this load does not contain any hazardous
 materials, medical waste or liquids of any type.
 Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-004
 GPS N35.25.490 W108.06.560 EL7074

NET AMOUNT	947.70
TENDERED	
CHANGE	
CHECK NO.	

WW6TH TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

James Harvey

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		Page 1 of 1	
Generator's Name and Mailing Address		FCCFEED-003		1			
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (800) 424.9300 (505) 722-3833							
Transporter 1 Company Name		US EPA ID Number		State Transporter's ID		006648	
Chemical Transport, Inc		AZT05001008		Transporter 1 Phone		480-784-4833	
Transporter 2 Company Name		US EPA ID Number		State Transporter's ID			
				Transporter 2 Phone			
Designated Facility Name and Site Address		US EPA ID Number		State Facility's ID		swm-051740 (SP)	
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323				Facility's Phone		(505) 905-8402	
WASTE DESCRIPTION		No.	Containers Type	Total Quantity	Unit		
FCC Tank 714 Overflow - Cleanup		1	CM	16	Y		
Additional Descriptions for Materials Listed Above		Handling Codes for Wastes Listed Above					
Profile # 3475-2016 -A B.W. # 1121		N/A					
Special Handling Instructions and Additional Information							
Chemtrec (800) 424-9300							
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC. (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.							
Printed/Typed Name		Signature		Date			
ALVIN Dorsey		Alvin Dorsey		02/23/16			
Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date			
Printed/Typed Name		Signature		Date			
ALVIN Dorsey		Alvin Dorsey		02/23/16			
Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date			
Printed/Typed Name		Signature		Date			
Discrepancy Indication Space							
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.							
Printed/Typed Name		Signature		Date			

SPECIAL WASTE MANIFEST

Generator

Transporter

Fac.

A Facility Copy

ENVIRONMENTAL

043

****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE		TICKET		GRID		WEIGHMASTER	
02		00075574				Joseph Kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
02/23/16	02/23/16	15:12	15:35	CT1			
REFERENCE				ORIGIN			
20824245				MCKINLEY COUNTY			

Scale 1 Gross Wt. LB
Scale 1 Tare Wt. LB
Net Weight LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
13.17	TON	P C S	65.000	856.05	0.00	856.05

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-003

GPS N35.25.490 W108.06.560 EL7074

BW #1121

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

NET AMOUNT	856.05
TENDERED	
CHANGE	
CHECK NO.	

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No. NMD000333211		Manifest Document No. FCCFEED-002		Page 1 of 1
Generator's Name and Mailing Address Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833				
Transporter 1 Company Name Chemical Transport, Inc		US EPA ID Number AZT05001008	State Transporter's ID 006648	
Transporter 2 Company Name		US EPA ID Number	Transporter 1 Phone 480-784-4833	
Designated Facility Name and Site Address NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323		US EPA ID Number	State Facility's ID swm-051740 (SP)	
			Facility's Phone (505) 905-8402	
WASTE DESCRIPTION				
FCC Tank 714 Overflow - Cleanup		No. 1	Containers Type CM	Total Quantity 16
				Unit Wt/Vol 4
Additional Descriptions for Materials Listed Above Profile # 3475-2016-A Bin # 1102		Handling Codes for Wastes Listed Above N/A		
Special Handling Instructions and Additional Information Chemtrec (800) 424-9300				
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.				
Printed/Typed Name Beck Larsen		Signature 	Date Month 02 Day 23 Year 16	
Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name James Hawley		Signature 	Date Month 02 Day 23 Year 16	
Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date Month Day Year	
Discrepancy Indication Space				
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.				
Printed/Typed Name		Signature	Date Month Day Year	

Return Copy to Environmental

#043

****DUPLICATE TICKET****
 101 Red Mesa Bluffs Drive
 PO Box 1330
 Thoreau, NM 87323

003475 WESTERN REFINERY
 PO BOX 62558
 PHOENIX AZ 85082-2558

SITE		TICKET		GRID		WEIGHMASTER	
02		00075558				Joseph Kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
02/23/16	02/23/16	13:24	14:16	CT2			
REFERENCE		ORIGIN					
20824245		MCKINLEY COUNTY					

Scale 1 Gross Wt. LB				67540				Inbound - Charge ticket			
Scale 1 Tare Wt. LB				37740							
Net Weight LB				29800							
QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL					
14.90	TON	P C S	65.000	968.50	0.00	968.50					
							Bin # 1102				
							Bal # FCCFEED-002				

Operating hours 8AM to 4:30PM Monday thru Friday. This
 certify that this load does not contain any hazardous
 materials, medical waste or liquids of any type.
 Driver was ON/OFF vehicle during weighing.

Comment FCCFEED-002

GPS N35.25.490 W108.06.560 EL7074

NET AMOUNT	968.50
TENDERED	
CHANGE	
CHECK NO.	

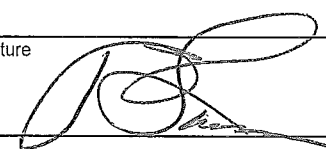
James H. Hough

WW671 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

043

SPECIAL WASTE MANIFEST

Generators US EPA ID No.		NMD000333211		Manifest Document No.		FCCFEED-001		Page 1 of 1		
Generator's Name and Mailing Address										
Western Refining-Southwest (Gallup Refinery) 92 Giant Crossing Rd Gallup, NM 87301 (505) 722-3833										
Transporter 1 Company Name				US EPA ID Number		State Transporter's ID		006648		
Chemical Transport, Inc				AZT05001008		Transporter 1 Phone		480-784-4833		
Transporter 2 Company Name				US EPA ID Number		State Transporter's ID				
						Transporter 2 Phone				
Designated Facility Name and Site Address				US EPA ID Number		State Facility's ID				
NWNM Regional Solid Waste - Redrock Landfill 101 Red Mesa Bluff Dr. Thoreau, NM 87323						swm-051740 (SP)				
Facility's Phone						(505) 905-8402				
WASTE DESCRIPTION					Containers		Total		Unit	
					No.		Quantity		Wt/Vol	
FCC Tank 714 Overflow - Cleanup					1		16		Y	
Additional Descriptions for Materials Listed Above					Handling Codes for Wastes Listed Above					
Profile # 3475-2016-A					N/A					
Bw # 989										
Special Handling Instructions and Additional Information										
Chemtrec (800) 424-9300										
										
GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.										
Printed/Typed Name					Signature		Date			
Beck Larsen							02/23/16			
Transporter 1 Acknowledgement of Receipt of Materials					Signature		Date			
Transporter 2 Acknowledgement of Receipt of Materials					Signature		Date			
ABEL TATOLA							2/23/16			
Discrepancy Indication Space										
Facility Owner or Operator: I hereby acknowledge receipt of special waste as indicated upon this manifest, except as noted above in Discrepancy Indication Space.										
Printed/Typed Name					Signature		Date			

Return Copy to Environmental

#043

SPECIAL WASTE MANIFEST

Generator

Transporter

Facility

****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE	TICKET	GRID		WEIGHMASTER	
02	00075557			Joseph kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
02/23/16	02/23/16	13:22	13:50	CT1	
REFERENCE		ORIGIN			
20824245		MCKINLEY COUNTY			

Scale 1 Gross Wt. 67260 LB
Scale 1 Tare Wt. 38620 LB
Net Weight 28640 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
14.32	TON	P C S	65.000	930.80	0.00	930.80

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.
Comment FCCFEED-001

TAX 0.00
Scale Fee 0.00

NET AMOUNT
930.80
TENDERED
CHANGE
CHECK NO.

WW6T1 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

****DUPLICATE TICKET****

101 Red Mesa Bluffs Drive
PO Box 1330
Thoreau, NM 87323

003475 WESTERN REFINERY
PO BOX 62558
PHOENIX AZ 85082-2558

SITE	TICKET	GRID		WEIGHMASTER	
02	00075568			Joseph kirk	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
02/23/16	02/23/16	14:26	14:26	CT1	
REFERENCE		ORIGIN			
20824245		MCKINLEY COUNTY			

Manual Gross Wt. 67260 LB
Manual Tare Wt. 38620 LB
Net Weight 28640 LB

Inbound - Charge ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
14.32	TON	P C S	65.000	930.80	0.00	930.80

Operating hours 8AM to 4:30PM Monday thru Friday. This
certify that this load does not contain any hazardous
materials, medical waste or liquids of any type.
Driver was ON/OFF vehicle during weighing.
Comment FCCFEED-001
GPS N35.25.490 W108.06.560 EL7074

TAX 0.00
Scale Fee 0.00

NET AMOUNT
930.80
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

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

D128644

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NMD00033211		Manifest Document No. 1011111		2. Page 1 of 1	
3. Generator's Name and Mailing Address WESTERN REFINING SOUTHWEST GALLUP REFINING 92 GIANT CROSSING ROAD GALLUP, NM 87301							
4. Generator's Phone (505) 722 9258							
5. Transporter 1 Company Name Advanced Chemical Transport Inc (SV)		6. US EPA ID Number CAR000070540		A. State Transporter's ID			
				B. Transporter 1 Phone			
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID			
				D. Transporter 2 Phone			
9. Designated Facility Name and Site Address Gandy Marley, Inc Section 4, 5, 8 & 9 of T11S, R31E NMPM Chavez County, NM 88202		10. US EPA ID Number NON HAZ		E. State Facility's ID			
				F. Facility's Phone			
11. WASTE DESCRIPTION				Containers		13. Total Quantity	
				No. Type		14. Unit Wt./Vol.	
a. Non-RCRA/Non-DOT Regulated Material Solid (Petroleum Contaminated Soil)				1		CM 19480 19480	
b.							
c.							
d.							
G. Additional Descriptions for Materials Listed Above Project Number 109107 Document # D128644 1) GANDY TPH WEG- + 714 = 20 R30				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information 24 hour emergency contact CHEMTREC 800-424-9300							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name Cheryl Johnson				Signature [Signature]		Date Month Day Year 10 7 14	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Eugene Vigil				Signature [Signature]		Date Month Day Year 10 27 14	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name [Name]				Signature [Signature]		Date Month Day Year 10 27 14	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name				Signature		Date Month Day Year	

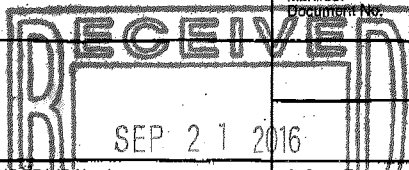
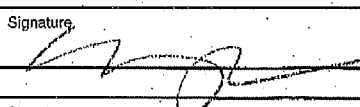
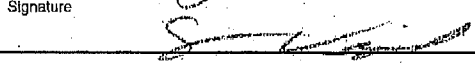
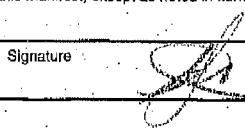
NON-HAZARDOUS WASTE

043

NON-HAZARDOUS WASTE MANIFEST

Please print or type

(Form designed for use on ellipse (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NMD000333211		Manifest Document No. D116283		2. Page 1 of 1	
3. Generator's Name and Mailing Address WESTERN REFINING SOUTHWEST GALLUP REFINING 92 GIANT CROSSING ROAD GALLUP, NM 87301							
4. Generator's Phone 505 722 0258							
5. Transporter 1 Company Name Advanced Chemical Transport Inc. (SV)		6. US EPA ID Number CAL000401204		A. State Transporter's ID			
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone			
				C. State Transporter's ID			
				D. Transporter 2 Phone			
9. Designated Facility Name and Site Address Gandy Waste Inc Section 4, 5, 8 & 9 of T113, R31E NMP/M Chavez County, NM 88202		10. US EPA ID Number NON HAZ		E. State Facility's ID			
				F. Facility's Phone			
11. WASTE DESCRIPTION				Containers		13. Total Quantity	
				No. Type		14. Unit Wt./Vol.	
a. Non-RCRA/Non-DOT Regulated Material Solid (Petroleum Contaminated Soil) T 76 714				1		CM	
						22580	
b.							
c.							
d.							
G. Additional Descriptions for Materials Listed Above 1) GANDY TPH WEG-				Project Number 97874 Document #: D116283		H. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information 4 hour emergency contact: CHEMTREC 800-424-9300							
							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name Cheryl Johnson				Signature 		Date 09/09/16	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature 		Date 9/9/16	
Printed/Typed Name Eugene Vigil				Signature		Date	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date	
Printed/Typed Name				Signature		Date	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.							
Printed/Typed Name Jose M. Calderon				Signature 		Date 09/10/16	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

PRINTED ON RECYCLED PAPER
UNION RECYCLINGPRINTED WITH
SOY INK



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66609**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>4</u> <u>4</u> <u>2</u> <u>1</u> <u>2</u> <u>8</u> <u>A</u> <u>Z</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	<u>D - DRUM</u>
				<u>B - BAG</u>
				<u>C - CARTON</u>
				<u>T - TONS</u>
				<u>Y - YARDS</u>
				<u>O - OTHER</u>

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-22-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-22-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920 / 9500 / Bin # 995

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-22-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3-22-16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/22/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-285-3605

Original
Ticket# 169789

Customer Name CHEMICAL TRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/18/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 119834
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SMOGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/18/2016 12:40:42	Scale1	ghunt		Tare	66900 lb
Out	03/18/2016 12:40:42		ghunt		Net	37400 lb
					Tons	29500 lb
						14.75

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.75	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	14.75	Tons				NM

Total Tax
Total Ticket

Driver's Signature



043
PLEASE CALL LANDFILL 24 HRS IN ADVANCE WITH SHIPPING NOTICE.**NON - HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 119834**Name Western Refining Southwest Inc. Generating Location _____Address I-40 Exit 39 I-40 Exit 39
Jamestown NM 87347 Jamestown NM 87347Phone No. 505 862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PAL 44212BAZ	Solidified FCC Feed	18	T
			14.75

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/18/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GurvinPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gurvin
AUTHORIZED AGENT'S NAME (PRINT)03-18-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name Chemical Transportation IncPhone No. 480-784-4833Address 1945 E. Jackson Street
Phoenix AZ 85034Driver's Name Abel TafoyaVehicle's No. 891/9925/Bmw #1188

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-18-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/18/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85139 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6065
- ☐ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ LONE CACTUS LANDFILL • 21402 North 7th Street • Phoenix, Arizona 85024 • (623) 581-0939
- ☐ IRONWOOD LANDFILL • 12720 East Highway 287 • Florence, Arizona 85232 • (520) 868-8778

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/18/16
DATE[Signature]
SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169766

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/18/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66792
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/18/2016 07:13:58	Scale1	ghunt		Tare	70500 lb
Out	03/18/2016 07:13:58		ghunt		Net	38600 lb
					Tons	31900 lb
						15.95

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.95	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.95	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66792

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39

I-40 @ Exit 39

Jamestown, NM 87347

Jamestown, NM 87347

Phone No. 505-862-1749

I.D. No. NM D000 333 221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>P D L 4 4 2 1 2 3 A Z</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u> <u>15.95</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

03-17-16

Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John Gurin

Phone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gurin

03-17-16

John Gurin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INC

Phone No. 480-784-4833

Address 1945 E. JACKSON STREET

Driver's Name Abel Tafuya

PHOENIX, AZ 85034

Vehicle's No. 891/9925 / Bin # 1051

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-17-16

SHIPMENT DATE

Abel Tafuya

DRIVER'S SIGNATURE

3/18/16

DELIVERY DATE

Abel Tafuya

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/18/16

DATE

Gary Hunt

SIGNATURE



Painted Desert Landfill 10P
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169805

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/21/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing \$ 0000415
State Waste Code Gen EPA ID
Manifest 119833
Destination Grid
PO
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/21/2016 07:05:18	Scale1	paty		Tare	57850
Out	03/21/2016 07:05:18		paty		Net	36740
					Tons	30920
Comments						15.4

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.46	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADE Fee	100	15.46	Tons				NM

Total Tax
Total Ticket

Driver's Signature



Product 043
PLEASE CALL LANDFILL 24 HRS IN ADVANCE WITH SHIPPING NOTICE.
**NON - HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 119833

Name Western Refining Southwest, INC

Generating Location _____

Address I-40 Exit 39

I-40 Exit 39

Jamestown, NM 87347

Jamestown NM 87347

Phone No. 505 862-1749

I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128A2	Solidified FCC Feed	18	T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)

3/18/16
DATE

[Signature]
SIGNATURE

CONTRACTOR

Name John Girvin

Phone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)

03-18-16
DATE

SIGNATURE

TRANSPORTER

Name Chemical Transportation, INC

Phone No. 480-784-4833

Address 1945 E. JACKSON Street

Driver's Name JAMES HAWLEY

Phoenix, AZ 85034

Vehicle's No. 920/9500/BIN # 906

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-18-16
SHIPMENT DATE

[Signature]
DRIVER'S SIGNATURE

3-18-16
DELIVERY DATE

[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85139 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6065
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ LONE CACTUS LANDFILL • 21402 North 7th Street • Phoenix, Arizona 85024 • (623) 581-0939
- ☐ IRONWOOD LANDFILL • 12720 East Highway 287 • Florence, Arizona 85232 • (520) 868-8778

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Faty Weatherford
NAME (PRINT)

3/21/16
DATE

[Signature]
SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169764

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/18/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66589
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/18/2016 07:07:25	Scale1	ghunt		Tare	68720 11
Out	03/18/2016 07:07:25		ghunt		Net	36940 11
					Tons	31780 11
Comments						15.89

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.89	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	15.89	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST 020**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66589**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM.D000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T 15.89T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-17-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GivvinPhone No. 520-780 6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Givvin

AUTHORIZED AGENT'S NAME (PRINT)

03-17-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500 / Bin # 1121

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-17-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-18-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/18/16

DATE

[Signature]

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Ticket# 169948

Customer Name CHEMICALTRANSPORTATION Chem: Carrier CTI CTI
Ticket Date 03/25/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing \$ 0000415
State Waste Code Gen EPA ID
Manifest 66621
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/25/2016 10:04:41	Scale1	paty		Tare	65020 lb
Out	03/25/2016 10:04:41		paty		Net	38600 lb
					Tons	26420 lb
						13.21

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	13.21	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	13.21	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66621**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1748I.D. No. ~~717~~ NMDD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	12		D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-24-16Alvin D

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-24-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER**CHEMICAL TRANSPORTATION, INC****480-784-4833**

Name _____

Phone No. _____

Address 1945 E. JACKSON STREETDriver's Name Abel TafoyaAddress PHOENIX, AZ 85034Vehicle's No. 891/9925/ Bin # 855

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-24-16[Signature]3/25/16[Signature]

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford3/25/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169938

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/24/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket#
Hauling Ticket#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66620
Destination Grid
PO
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/24/2016 15:49:31	Scale1	paty		Tare	61620 lb
Out	03/24/2016 15:49:31		paty		Net	38600 lb
					Tons	23020 lb
Comments						11.51

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	11.51	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	11.51	Tons				NM

Total Tax
Total Ticket

Driver's Signature



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66620**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL	442128AZ	Solidified FCC Feed	18	T
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-24-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-24-16

DATE

John Girvin

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TafaYAPHOENIX, AZ 85034Vehicle's No. 891/9925/Bin 1121

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-24-16

SHIPMENT DATE

DRIVER'S SIGNATURE

3/24/16

DELIVERY DATE

Abel TafaYA

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/24/16

DATE

Patty Weatherford

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169922

Customer Name CHEMICALTRANSPORTATION Chemid Carrier CTI CTI
Ticket Date 03/24/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66617
Destination Grid
PO
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/24/2016 10:21:47	Scale1	paty		Tare	67600 lb
Out	03/24/2016 10:21:47		paty		Net	38600 lb
					Tons	29000 lb
						14.50

Comments

Product	LD%	Qty	DOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		14.50	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		14.50	Tons				NM

Total Tax
Total Ticket

Driver's Signature



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66617

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM1000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/24/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-24-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name ABEL TAFOLAPHOENIX, AZ 85034Vehicle's No. 891/9925/Bin # 713

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-24-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/24/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford
NAME (PRINT)3/24/16
DATE[Signature]
SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Ticket# 169874

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/23/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66608
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/23/2016 07:12:31	Scale1	paty			72900 1b
Out	03/23/2016 07:12:31		paty		Tare	38600 1b
					Net	34300 1b
					Tons	17.15

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. N.-T 100		17.15	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env. 100			%				NM
5 ADE-ADEQ Fee 100		17.15	Tons				NM

Total Tax
Total Ticket

Driver's Signature





043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66608

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39

I-40 @ Exit 39

Jamestown, NM 87347

Jamestown, NM 87347

Phone No. 505-882-1749

I.D. No. NMD000333221

PROFILE APPROVAL NO.

WASTE DESCRIPTION

QUANTITY

UNITS

UNIT

PD L 4 4 2 1 2 8 A Z

Solidified FCC Feed

18 T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

03-22-16

Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John Girvin

Phone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

03-22-16

[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INC

Phone No. 480-784-4833

Address 1945 E. JACKSON STREET

Driver's Name Abel TAFOLA

PHOENIX, AZ 85034

Vehicle's No. 891/9925/131W #845

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-22-16

Abel Tafola

2/23/16

Abel Tafola

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

3/23/16

Patty Weatherford

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3645

Original
Ticket# 169847

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/22/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 56605
Destination Grid
PD
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	74300 lb
In	03/22/2016 07:15:40	Scale1	paty		Tare	38600 lb
Out	03/22/2016 07:15:40		paty		Net	35700 lb
					Tons	17.85

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		17.85	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		17.85	Tons				NM

Total Tax
Total Ticket

Driver's Signature



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66605

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-662-1749I.D. No. NM A000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
		17.85/7		

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ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-21-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

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John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-21-16

DATE

John Girvin

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TAFOLAPHOENIX, AZ 85034Vehicle's No. 891/9925/BIN# 870

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-21-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/22/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/22/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169835

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/21/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 119837
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/21/2016 14:27:52	Scale1	paty			72040 lb
Out	03/21/2016 14:27:52		paty		Tare	38600 lb
					Net	33440 lb
					Tons	16.72

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.72	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.72	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS IN ADVANCE WITH SHIPPING NOTICE.

NON - HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 119837

Name Western Refining Southwest INC. Generating Location _____
Address I-40 Exit 39 I-40 Exit 39
Jamestown NM 87347 Jamestown NM 87347
Phone No. 505 862-1749 I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified Fcc Feed	18	T	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen

AUTHORIZED AGENT'S NAME (PRINT)

03-18/16

DATE

[Signature]

SIGNATURE

CONTRACTOR

Name John Girvin Phone No. 520 780-6138
Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-18/16

DATE

[Signature]

SIGNATURE

TRANSPORTER

Name Chemical Transportation INC. Phone No. 480-784-4833
Address 1945 E Jackson Street Driver's Name Abel TAFOLA
Phoenix AZ. 85034 Vehicle's No. 891/9925/BIN # 999

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-18-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/21/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85139 • (602) 256-0630
☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6065
☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
☐ LONE CACTUS LANDFILL • 21402 North 7th Street • Phoenix, Arizona 85024 • (623) 581-0939
☐ IRONWOOD LANDFILL • 12720 East Highway 287 • Florence, Arizona 85232 • (520) 868-8778

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/21/16

DATE

[Signature]

SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



9801 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169736

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/17/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66595
Destination Grid
PD
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/17/2016 08:04:22	Scale1	ghunt			72140 lb
Out	03/17/2016 08:04:22		ghunt		Tare	38600 lb
					Net	33540 lb
					Tons	16.77

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.77	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.77	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66595**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NM D000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442121AZ	Solidified FCC Feed	18	T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Alvin Doisey

AUTHORIZED AGENT'S NAME (PRINT)

03-16-16

DATE

Alvin Doisey

SIGNATURE

CONTRACTORName John GivinsPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givins
AUTHORIZED AGENT'S NAME (PRINT)03-16-16

DATE

[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-724-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafuyaVehicle's No. 891/9925 / B.W. H/983

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/17/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/17/16

DATE

[Signature]

SIGNATURE



PAVED DESERT LANDFILL
3001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169760

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/17/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66598
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/17/2016 14:39:10	Scale1	Orlando		Tare	72760 lb
Out	03/17/2016 14:38:10		Orlando		Net	38600 lb
					Tons	34160 lb
						17.08

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W. -T 100		17.08	Tons				NM
2 RCA-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surchang 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		17.08	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66598**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1748I.D. No. NMD000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**PDL 442128AZSolidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-17-16 Alvin Dorsey

DATE

SIGNATURE

CONTRACTORName John GavinPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gavin

AUTHORIZED AGENT'S NAME (PRINT)

03-17-16

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4533Address 1845 E. JACKSON STREETDriver's Name Abel TAFORAPHOENIX, AZ 85034Vehicle's No. 891/9925/BW # 1102

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-17-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/17/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]

NAME (PRINT)

3-17-16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

8#

Original
Ticket# 169317

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/01/2016 Vehicle# B91 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66601
Destination Grid
PG
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/01/2016 15:24:22	Scale1	ghunt		Tare	69880 lb
Out	03/01/2016 15:24:22		ghunt		Net	38600 lb
					Tons	31280 lb
						15.64

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		15.64	Tons				NM
2 RCR-P-Regulatory C 100			%				
3 FUEL-Fuel Surcharg 100			%				
4 EVF-P-Standard Env 100			%				
5 ADE-ADED Fee 100		15.64	Tons				

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66601**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM D000333211

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-01-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GivinsPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givins

AUTHORIZED AGENT'S NAME (PRINT)

3/1/16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETPHOENIX, AZ 85024Driver's Name ABEL TAFOLAVehicle's No. 891/9925/RW # 845

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-1-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/1/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/1/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169364

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/02/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66798
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/02/2016 13:18:46	Scale1	paty		Tare	61640 lb 38600 lb
Out	03/02/2016 13:19:46		paty		Net	23040 lb
					Tons	11.52

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	11.52	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	11.52	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66798**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	11.52/T	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-02-16

DATE

Alvin D

SIGNATURE

CONTRACTORName John GiamPhone No. 520 780 6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Giam

AUTHORIZED AGENT'S NAME (PRINT)

3-2-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel T. TolaPHOENIX, AZ 85034Vehicle's No. 891 / 9925 / Bin # 1019

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-2-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Kathy Butterfield

NAME (PRINT)

3/2/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 85032
Ph: 928-288-3605

Original
Ticket# 169331

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/02/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66796
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/02/2016 07:58:53	Scale1	paty		Tare	71940 lb
Out	03/02/2016 07:58:53		paty		Net	38500 lb
					Tons	33340 lb
						16.67

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		16.67	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		16.67	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66796**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address 140 @ Exit 30140 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1749I.D. No. NM D000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u>	<u>442128AZ</u>	<u>18</u>	<u>16-67/7</u>	<u>D - DRUM</u>
<u></u>	<u></u>	<u></u>	<u></u>	<u>B - BAG</u>
<u></u>	<u></u>	<u></u>	<u></u>	<u>C - CARTON</u>
<u></u>	<u></u>	<u></u>	<u></u>	<u>T - TONS</u>
<u></u>	<u></u>	<u></u>	<u></u>	<u>Y - YARDS</u>
<u></u>	<u></u>	<u></u>	<u></u>	<u>O - OTHER</u>

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Back Larsen

AUTHORIZED AGENT'S NAME (PRINT)

3/1/16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GreenPhone No. 570 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Green

AUTHORIZED AGENT'S NAME (PRINT)

3-1-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4033Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafayaVehicle's No. 891/9925 / Bin # 989

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-1-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3-2-16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

NAME (PRINT)

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

DATE

TRANSPORTER - PINK

GENERATOR - GOLDENROD

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169389

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/03/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66799
Destination Grid
PO

Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/03/2016 10:18:42	Scale1	paty		Tare	70480 lb
Out	03/03/2016 10:18:42		paty		Net	38600 lb
Comments					Tons	15.94

Product	LDX	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.94	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.94	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66799**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1748I.D. No. NMA 000333721

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS
PDL	442128AZ	Solidified FCC Feed	18	T
			15.94	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/3/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John Girvin (Cti)Phone No. 520 780-6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Girvin
AUTHORIZED AGENT'S NAME (PRINT)3-3-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafolaVehicle's No. 891/9925/Bmw H1121

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-3-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/3/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

NAME (PRINT)

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

DATE

TRANSPORTER - PINK

GENERATOR - GOLDENROD

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 85032
Ph: 928-288-3605

Ticket# 169412

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/03/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66800 Grid
Destination
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSMGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/03/2016 15:33:22	Scale1	paty		Tare	73600 11
Out	03/03/2016 15:33:22		paty		Net	38600 11
					Tons	35000 11
						17.5

Comments

Product	LDX	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.50	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.50	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66800**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333ZZ1

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 44212BAZ	Solidified FCC Feed	18	T	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-03-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GivinsPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givins3-3-16John Givins

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name ABEL TAFDYAVehicle's No. 891 19925 / BIN# 996

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-3-16Abel Tafdya

SHIPMENT DATE

DRIVER'S SIGNATURE

3/3/16Abel Tafdya

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐ I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Taty Weather3/3/16Taty Weather

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 920-288-3605

Original
Ticket# 169330

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/02/2016 Vehicle# 818 - 945 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66795
Destination Grid
PD
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/02/2016 07:29:09	Scale1	paty		Tare	64140 lb
Out	03/02/2016 08:02:05	Scale1	paty		Net	35820 lb
					Tons	28320 lb
Comments						14.15

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		14.16	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		14.16	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66795**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1740I.D. No. NM D000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	18	

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/1/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GivonPhone No. 570-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givon
AUTHORIZED AGENT'S NAME (PRINT)3-1-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 818/9500/BIN#945

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-1-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-2-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]
NAME (PRINT)3-2-16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169366

Customer Name CHEMICALTRANSPORTATION Chemin Carrier CTI CTI
Ticket Date 03/02/2016 Vehicle# 818 - ~~245~~ Volume
Payment Type Credit Account Container 1198
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66797
Destination Grid
PU
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/02/2016 13:26:01	Scale1	paty		Tare	65940 lb
Out	03/02/2016 13:26:01		paty		Net	35820 lb
					Tons	30120 lb
						15.06

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.06	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.06	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66797**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 38I-40 @ Exit 38Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS
PDL	442128AZ	Solidified FCC Feed	18	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-02-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

[Signature]3-2-16John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 818 / 9500 / Bin # 1198

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

3-2-16[Signature]

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Toby Weatherford3/2/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169512

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/04/2016 Vehicle# 091 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 56563
Destination Grid
PO CHEVRON SD0015159693
Profile 442129AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWBALLUP WESTERN REFINING SOUTHWEST BALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/04/2016 13:06:48	Scalet	paty		Tare	63000 lb
Out	03/04/2016 13:06:48		paty		Net	38600 lb
					Tons	24400 lb
Comments	REPLACEMENT TICKET FOR TICKET # 169444					12.20

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		12.20	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEM Fee 100		12.20	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66572**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NMD000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**PDL 442123AZSolidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-09-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-09-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name JAMES HAWLEYVehicle's No. 920/9500 / Bin # 845

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-09-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-9-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Daryl Wootch

NAME (PRINT)

3/9/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169497

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/08/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66566
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFINING83WGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/08/2016 07:44:09	Scale1	paty		Tare	68140 lb
Out	03/08/2016 08:15:42	Scale1	paty		Net	36940 lb
					Tons	31200 lb

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.60	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.60	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James Hays





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66566**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-892-1749I.D. No. NMD000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**PDL 442128AZSolidified FCC Feed12T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

B. Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/7/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-07-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1045 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/BW #1038

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-07-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE03-08-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]
NAME (PRINT)3/8/16
DATE[Signature]
SIGNATURE



PAINTED DESERT LANDFILL
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169523

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/08/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66568
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/08/2016 13:08:37	Scale1	paty		Tare	65960 lb
Out	03/08/2016 13:08:37		paty		Net	36940 lb
					Tons	29020 lb
						14.51

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.51	Tons				NM
2 RCR-P-Regulatory C	100		%				
3 FUEL-Fuel Surcharg	100		%				
4 EVF-P-Standard Env	100		%				
5 ADE-ADEQ Fee	100	14.51	Tons				

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66568**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM000533221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>44212BAZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-08-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName Sohn GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Sohn Girvin03-08-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 92019500 / RM # 1069

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-08-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3-8-16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]

NAME (PRINT)

3/8/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 88052
Ph: 928-288-3505

Original
Ticket# 159473

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/07/2016 Vehicle# 920 205 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66565 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	71760 lb
In	03/07/2016 11:53:16	Scale1	PATY		Tare	36800 lb
Out	03/07/2016 12:27:51	Scale1	PATY		Net	34960 lb
					Tons	17.48

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.48	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.48	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66565**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM D000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS
P	D	Solidified FCC Feed	18	T
4	4			
2	1			
2	8			
A	Z			
	</			

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-07-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

03-07-16

DATE

John Girvin

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500 / Bm 41051

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-07-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherhead

NAME (PRINT)

3/7/16

DATE

Patty Weatherhead

SIGNATURE



PAINTED DESERT LANDFILL
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169478

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/07/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66564
Destination Grid
PO
Profile 442129AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/07/2016 12:53:01	Scale1	PATY		Tare	74950 lb
Out	03/07/2016 12:53:01		PATY		Net	35600 lb
					Tons	18.18

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	18.18	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	18.18	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66564

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address 140 @ Exit 38

140 @ Exit 38

Jamestown, NM 87347

Jamestown, NM 87347

Phone No. 505-862-1749

I.D. No. NMD000332221

PROFILE APPROVAL NO.

WASTE DESCRIPTION

QUANTITY

UNITS

UNIT

PDL 442128AZ

Solidified FCC Feed

18

T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DOISEY

AUTHORIZED AGENT'S NAME (PRINT)

03-07-16

DATE

Alvin D

SIGNATURE

CONTRACTOR

Name John Gavin

Phone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gavin

AUTHORIZED AGENT'S NAME (PRINT)

03-07-16

DATE

[Signature]

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INC

Phone No. 480-784-4833

Address 1945 E. JACKSON STREET

PHOENIX, AZ 85034

Driver's Name _____

Vehicle's No. B91/9925/BIN#1102

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-07-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/8/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]

NAME (PRINT)

3/7/16

DATE

[Signature]

SIGNATURE

1-005 / AZ

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfills
9001 N. Porter
Joseph City, AZ, 86403
Ph: 928-288-3605

Original
Ticket# 169520

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/08/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66569
Destination Direct Landfill Grid
PJ
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/08/2016 12:29:06	Scale1	Orlando		Tare	68060 lb
Out	03/08/2016 12:29:06		Orlando		Net	38600 lb
					Tons	29460 lb
						14.73

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.73	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	14.73	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66569**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u>	<u>442128AZ</u>	<u>12</u>	<u>T</u>	<u>T - TONS</u>
<u> </u>	<u> </u>	<u>14.73</u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DOISEY

AUTHORIZED AGENT'S NAME (PRINT)

03-08-16

DATE

Alvin Doisey

SIGNATURE

CONTRACTORName John S. GreenPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John S. Green

AUTHORIZED AGENT'S NAME (PRINT)

03-08-16

DATE

John S. Green

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name Abel TAFOLIAPHOENIX, AZ 85034Vehicle's No. 891/9925/BIN # 952

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-08-16

SHIPMENT DATE

Abel Tafolia

DRIVER'S SIGNATURE

DELIVERY DATE_____
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Orlando Serna

NAME (PRINT)

3-8-16

DATE

Orlando Serna

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169496

Customer Name CHEMICALTRANSPORTATION Chemig Carrier CTI CTI
Ticket Date 03/08/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66567
Destination Grid
PO
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWBALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/08/2016 07:30:59	Scale1	paty		Tare	68920 lb
Out	03/08/2016 07:30:59		paty		Net	38600 lb
					Tons	30320 lb
						15.16

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.16	Tons				NM
2 RCR-P-Regulatory C	100		%				
3 FUEL-Fuel Surcharg	100		%				
4 EVF-P-Standard Env	100		%				
5 ADE-ADEQ Fee	100	15.16	Tons				

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66567**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1748I.D. No. NM D000333271**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**

PDL	4	4	2	1	2	3	A	Z
-----	---	---	---	---	---	---	---	---

Solidified FCC Feed12T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

B. Larson
AUTHORIZED AGENT'S NAME (PRINT)3/7/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GiamPhone No. 570 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Giam
AUTHORIZED AGENT'S NAME (PRINT)03-07-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name ABEL TATOYAPHOENIX, AZ 85034Vehicle's No. 891/9925/B.W.H. 1099

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-07-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE03-07-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford
NAME (PRINT)3/8/16
DATE[Signature]
SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



3801 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Ticket# 169513

WASTE MANAGEMENT

CHEMICAL TRANSPORTATION Chemical Carrier CTI CTI

Ticket Date	03/04/2016	Vehicle#	891	Volume
Payment Type	Credit Account	Container		
Manual Ticket#		Driver		
Hauling Ticket#		Check#		
Route		Billing #	0000415	
State Waste Code		Gen EPA ID		
Manifest	66562			
Destination		Grid		
PO	CHEVRON SD0015159693			
Profile	442128AZ (SOLIDIFIED FCC FEED)			
Generator	160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP			

	Time	Scale	Operator	Inbound	Gross	66480 lb
In	03/04/2016 08:09:40	Scale1	paty		Tare	38600 lb
Out	03/04/2016 08:09:40		paty		Net	27880 lb
					Tons	13.94

Comments REPLACEMENT TICKET FOR TICKET # 169423

Product	LDX	Qty	LDK	Rate	Tax	Amount	Origin
1 Cont Soil Sp. M.-T 100		13.94	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		13.94	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James H. [Signature]





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66563**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address 140 @ Exit 39140 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD 000 333 221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**PDL 442123AZSolidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

B. Larson

AUTHORIZED AGENT'S NAME (PRINT)

3/4/16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-04-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1045 E. JACKSON STREETDriver's Name Abel T. FoyPHOENIX, AZ 85034Vehicle's No. 891/9925 / Bin # 1100

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-04-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/4/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weathers

NAME (PRINT)

3/4/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill 10#
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170039

Customer Name CHEMICALTRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/30/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66628
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/30/2016 07:17:49	Scale1	paty		Tare	65400 lb
Out	03/30/2016 07:17:49		paty		Net	30200 lb
					Tons	27200 lb
Comments						13.60

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		13.60	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		13.60	Tons				NM

Total Tax
Total Ticket

Driver's Signature

CARLO F MONTEZUMA
0411

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66628

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM D000333 221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	18	T
		13.60/T	

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-29-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Girvin03-29-16John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name CARLO F. MONSISVALSPHOENIX, AZ 85034Vehicle's No. 884/9000/BW #985

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation

03-29-16C.F. Monsisvals3-30-16

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐ I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.Patricia Weatherford3/30/16Patricia Weatherford

NAME (PRINT)

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170001

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/29/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66524
Destination Grid
PO
Profile 4/21280Z (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

Time Scale Operator Inbound Gross 70260 1
In 03/29/2016 07:13:03 Scale1 paty 38200 1
Out 03/29/2016 07:57:29 Scale1 paty 32060 1
Net 16.0
Tons 16.0

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.03	Tons				NM
2 RCR-P-Regulatory C	100	%					NM
3 FUEL-Fuel Surcharg	100	%					NM
4 EVF-P-Standard Env	100	%					NM
5 ADE-ADEQ Fee	100	16.03	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66624**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Berk Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/28/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-28-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name CARLO F MONSIEVAISVehicle's No. 884 / 9000 / B.W # 870

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-28-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-28-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Kathy Weathers
NAME (PRINT)3/29/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 170029

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/29/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66627
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/29/2016 13:59:45	Scale1	paty		Tare	69720 lb
Out	03/29/2016 13:59:45		paty		Net	38200 lb
					Tons	31520 lb
Comments						15.76

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.76	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.76	Tons				NM

Total Tax
Total Ticket

Driver's Signature

CARLO MONSIEVAIS

78411





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66627****Western Refining Southwest, Inc. - Gallup**

Name _____

Generating Location _____

Address **I-40 @ Exit 30****I-40 @ Exit 30****Jamestown, NM 87347****Jamestown, NM 87347**Phone No. **505-862-1749**I.D. No. **NMD000333221**

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen

AUTHORIZED AGENT'S NAME (PRINT)

3/29/16

DATE

SIGNATURE

CONTRACTORName **John Girvin**Phone No. **570 780-6138**

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-29-16

DATE

SIGNATURE

TRANSPORTERName **CHEMICAL TRANSPORTATION, INC**Phone No. **480-784-4833**Address **1945 E. JACKSON STREET**Driver's Name **Carlo F Monsisvais****PHOENIX, AZ 85034**Vehicle's No. **884/9000/Bin # 955**

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-29-16

SHIPMENT DATE

DRIVER'S SIGNATURE

3-29-16

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

NAME (PRINT)

3/29/16

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 162982

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/28/2016 Vehicle# 884 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66623
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/28/2016 10:58:28	Scale1	paty		Tare	71440 1
Out	03/28/2016 11:35:54	Scale1	paty		Net	36840 1
					Tons	34600 1
						17.3

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.30	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.30	Tons				NM

CARLO F MONTEZUMA

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66623**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Alvin Dorsey03-28-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GivinsPhone No. 520 780 6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Givins03-28-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name CARLO F MONTEZUALESPHOENIX, AZ 85034Vehicle's No. 884 / 9000 / BIN # 930

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-28-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Polly Weatherford

NAME (PRINT)

3/28/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 159804

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/21/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 119836 Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/21/2016 07:02:47	Scaled	paty		Tare	67000 lb
Out	03/21/2016 07:02:47		paty		Net	37400 lb
					Tons	29680 lb
						14.80

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.80	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	14.80	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS IN ADVANCE WITH SHIPPING NOTICE.

**NON - HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 119836**

Name Western Refining Southwest INC Generating Location _____
Address I-40 Exit 39 I-40 Exit 39
James town NM 87347 James town NM, 87347
Phone No. 505 862-1749 I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solid, Fied FCC Feed	18	T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen 03/18/16 [Signature]
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

CONTRACTOR

Name John Girvin Phone No. 520 780 6138
Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin 03-18-16 [Signature]
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

TRANSPORTER

Name Chemical Transportation INC. Phone No. 480-784-4833
Address 1945 E JACKSON Street Driver's Name Rene Barriore
Phoenix AZ 85034 Vehicle's No. 921/9114/BIN# 1244
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-18-16 [Signature] 3/21/16 [Signature]
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85139 • (602) 256-0630
☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6065
☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
☐ LONE CACTUS LANDFILL • 21402 North 7th Street • Phoenix, Arizona 85024 • (623) 581-0939
☐ IRONWOOD LANDFILL • 12720 East Highway 287 • Florence, Arizona 85232 • (520) 868-8778

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Judy Weatherford 3/24/16 [Signature]
NAME (PRINT) DATE SIGNATURE

ORIGINAL - WHITE DISPOSAL FACILITY - YELLOW TRANSPORTER - PINK GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-289-3605

Original
Ticket# 169842

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/22/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen. EPA ID
Manifest 66608
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/22/2016 07:02:48	Scale1	paty		Tare	67280 lb
Out	03/22/2016 07:02:48		paty		Net	37400 lb
					Tons	29880 lb
Comments						14.94

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cent Soil Sp. W.-T	100	14.94	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEG Fee	100	14.94	Tons				NM

Total Tax
Total Ticket

Driver's Signature



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66606

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM500033221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>			

UNIT

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-21-16

DATE

Alvin D

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-21-16

DATE

[Signature]

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Rene BarrigaVehicle's No. 921 / 9114 / Bin # 906

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-21-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/22/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/22/16

DATE

[Signature]

SIGNATURE



9001 N. Porter
Joseph City, AZ, 85032
Ph: 928-288-3605

Ticket# 169068

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/22/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66810 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/22/2016 13:38:04	Scale1	paty		Tare	73940
Out	03/22/2016 13:38:04		paty		Net	37400
					Tons	18.1

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. N.-T	100	18.27	Tons				NM
2 RCR-P-Regulatory C	100		%				
3 FUEL-Fuel Surcharg	100		%				
4 EVF-P-Standard Env	100		%				
5 ADE-ADEQ Fee	100	18.27	Tons				

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66610**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMDD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				B - BAG
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				C - CARTON
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				T - TONS
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				Y - YARDS
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-22-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GrevinPhone No. 520 780 6138

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Grevin03-22-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Rene BarrigaVehicle's No. 921/9114/B.W.# 754

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-22-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/22/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Kelly Walther

NAME (PRINT)

3/22/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169906

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/23/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66813
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/23/2016 14:50:14	Scale1	paty		Tare	77620 11
Out	03/23/2016 14:50:14		paty		Net	37400 11
Comments					Tons	40220 11
						20.11

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	20.11	Tons				NM
2 ACR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADE Fee	100	20.11	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66613**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u> <u> </u>	<u> </u> <u> </u>	<u> </u> <u> </u>	<u> </u> <u> </u>
<u> </u> <u> </u>	<u> </u> <u> </u>	<u> </u> <u> </u>	<u> </u> <u> </u>

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

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ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-23-16

DATE

Alvin D

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-23-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name ABEL TAFOLA Rene GarryVehicle's No. 8914951 Bin # 1099

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-23-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/23/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Jody Weatherford

NAME (PRINT)

3/23/16

DATE

[Signature]

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Ticket# 169886

Customer Name CHEMICAL TRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/23/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66614
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/23/2016 09:23:56	Scale1	paty		Tare	69630 lb
Out	03/23/2016 09:23:56		paty		Net	37400 lb
					Tons	32280 lb
Comments						16.14

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.14	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Eny	100		%				NM
5 ADE-ADEQ Fee	100	16.14	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66614**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM0000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-23-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780 6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-23-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Rene BarrigaPHOENIX, AZ 85034Vehicle's No. 921/9114/BIN#1982

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-23-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/23/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/23/16

DATE

[Signature]

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-298-3605

Ticket# 167717

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/24/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66615 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/24/2016 08:34:58	Scale1	paty		Tare	60220 11
Out	03/24/2016 08:34:58		paty		Net	37400 11
					Tons	22820 11
						11.4

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	11.41	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	11.41	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66615**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM000333271**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**PDL 442128AZSolidified FCC Feed18TD - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Rene BarragaPHOENIX, AZ 85034Vehicle's No. 921 / 9114 / B.W. # 947

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-24-16
SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

NAME (PRINT)

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD

SIGNATURE



Painted Desert Landfill 10#
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169934

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/24/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66619
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/24/2016 14:37:56	Scale1	paty			63660 lb
Out	03/24/2016 14:37:56		paty		Tare	37400 lb
					Net	26260 lb
Comments					Tons	13.13

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	13.13	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEG Fee	100	13.13	Tons				NM

[Handwritten Signature]

Driver's Signature

Total Tax
Total Ticket



043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66619**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL 442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)DATE 3/24/16SIGNATURE [Signature]**CONTRACTOR**Name John GreenPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Green
AUTHORIZED AGENT'S NAME (PRINT)DATE 03-24-16SIGNATURE [Signature]**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Rene BarreraPHOENIX, AZ 85034Vehicle's No. 921/9114/BIN # 1167

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-24-16
SHIPMENT DATEDEIVER'S SIGNATURE [Signature]DELIVERY DATE 3/24/16DRIVER'S SIGNATURE [Signature]**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

NAME (PRINT) [Signature]DATE 3/24/16SIGNATURE [Signature]

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169797

Customer Name CHEMICALTRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/18/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 119035
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/18/2016 13:52:57	Scale1	ghunt		Tare	56000 11
Out	03/18/2016 13:52:57		ghunt		Net	37400 11
					Tons	18600 11
						9.31

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	9.30	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	9.30	Tons				NM

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS IN ADVANCE WITH SHIPPING NOTICE.NON - HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 119835

Name Western Refining Southwest Inc Generating Location _____
Address I-40 Exit 39 I-40 Exit 39
James town NM 87347 James Town NM 87347
Phone No. 505 862-1749 I.D. No. NMD 000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PAL 442128A2	Solidified FCC Feed	18	T 9.30	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen 3/18/16 [Signature]
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

CONTRACTOR

Name John Girvin Phone No. 520-780 6138

Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin 03-18-16 [Signature]
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

TRANSPORTER

Name Chemical Transportation, INC. Phone No. 480-784-4833
Address 1945 E Jackson Street Driver's Name Rene Barriaga
Phoenix AZ 85034 Vehicle's No. 921/9114 / Bin # 982

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-18-16 [Signature] 3/18/16 [Signature]
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85139 • (602) 256-0630
☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6065
☐ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
☐ LONE CACTUS LANDFILL • 21402 North 7th Street • Phoenix, Arizona 85024 • (623) 581-0939
☐ IRONWOOD LANDFILL • 12720 East Highway 287 • Florence, Arizona 85232 • (520) 868-8778

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT 3/18/16 [Signature]
NAME (PRINT) DATE SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-280-3605

Original
Ticket# 169767

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/18/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66800 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW6ALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/18/2016 07:16:15	Scale1	ghunt		Tare	66860.1 37400.1
Out	03/18/2016 07:16:15		ghunt		Net	29460.1
					Tons	14.7

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	14.73	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADE0 Fee	100	14.73	Tons				NM

Driver's Signature

Total Tax
Total Ticket



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST 020**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66600**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD 000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T 14.73	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-17-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-17-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER**CHEMICAL TRANSPORTATION, INC****480-784-4833**Name 1845 E. JACKSON STREET

Phone No. _____

Address PHOENIX, AZ 85034Driver's Name Rene BarrigaVehicle's No. 921/9114 / B.W. # 941

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-17-16

SHIPMENT DATE

[Signature]
DRIVER'S SIGNATURE3/18/16

DELIVERY DATE

[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/18/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169909

Customer Name CHEMICAL TRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/24/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66616
Destination Grid
AD
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/24/2016 07:07:28	Scale1	paty		Tare	65480 lb
Out	03/24/2016 07:07:28		paty		Net	36940 lb
					Tons	28540 lb
Comments						14.27

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		14.27	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		14.27	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66616**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	<u>D - DRUM</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>B - BAG</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>C - CARTON</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>T - TONS</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>Y - YARDS</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>O - OTHER</u>

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-23-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-23-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920 / 9500 / 982

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-23-16 James Hawley

SHIPMENT DATE

DRIVER'S SIGNATURE

3-24-16 James Hawley

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Faby Weather

NAME (PRINT)

3/24/16 [Signature]

DATE

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 920-288-3605

Original
Ticket# 169894

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/23/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 65612
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWBALLUP WESTERN REFINING SOUTHWEST GALLUP

Time	Scale	Operator	Inbound	Gross	
In 03/23/2016 12:16:47	Scale1	ghunt		56620	
Out 03/23/2016 12:16:47		ghunt		Tare	36940
				Net	19680
Comments				Tons	9.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		9.84	Tons				NM
2 RCR-P-Regulatory C 100			%				
3 FUEL-Fuel Surcharg 100			%				
4 EVF-P-Standard Env 100			%				
5 ADE-ADEQ Fee 100		9.84	Tons				

Total Tax
Total Ticket

Driver's Signature

043
PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.NON-HAZARDOUS
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66612

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL	442128AZ	Solidified FCC Feed	18	T	D - DRUM
					B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-23-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTOR

Name John GivrinPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givrin

AUTHORIZED AGENT'S NAME (PRINT)

03-23-16

DATE

John Givrin

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/Bin # 952

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-23-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-23-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/23/16

DATE

Patty Weatherford

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Dr. Agency
Ticket# 169871

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/23/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66611 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/23/2016 07:04:27	Scale1	paty		Tare	70260
Out	03/23/2016 07:04:27		paty		Net	36940
					Tons	33320
						16

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		16.66	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		16.66	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66611**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS
PDL	442128AZ	Solidified FCC Feed	18	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Lerson

AUTHORIZED AGENT'S NAME (PRINT)

3/22/16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-22-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/Bin # 906

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-22-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3-23-16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/23/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 920-288-3605

Original
Ticket# 169845

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/22/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66607
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/22/2016 07:00:57	Scale1	paty		Tare	68200 lb
Out	03/22/2016 07:00:57		paty		Net	36940 lb
					Tons	15.63

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. M.-T	100	15.63	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.63	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66607**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	B - BAG
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	C - CARTON
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	T - TONS
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	Y - YARDS
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-21-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-21-16

DATE

John Girvin

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/Bir # 1244

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-21-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-22-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Weatherford

NAME (PRINT)

3/22/16

DATE

Patty Weatherford

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169866

Customer Name CHEMICALTRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/22/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66609
Destination Grid
PD
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/22/2016 12:24:43	Scale1	ghunt		Tare	70560
Out	03/22/2016 12:24:43		ghunt		Net	36940
					Tons	33620
						16

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.81	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.81	Tons				NM

Total Tax
Total Ticket

Driver's Signature

Appendix F

Waste Profile Sheet and Waste Manifests

Requested Facility: Pen-Rob Landfill (Painted Desert)☐ Unsure Profile Number: 442128AZ☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____**A. GENERATOR INFORMATION (MATERIAL ORIGIN)**

1. Generator Name: Western Refining Southwest, Gallup
2. Site Address: Interstate 40 Exit 39
(City, State, ZIP) Jamestown NM 87347
3. County: McKinley
4. Contact Name: Beck Larsen
5. Email: _____
6. Phone: (505) 722-0217 7. Fax: _____
8. Generator EPA ID: _____ ☒ N/A
9. State ID: _____ ☒ N/A

C. MATERIAL INFORMATION

1. Common Name: Solidified FCC Feed
Describe Process Generating Material: ☐ See Attached
Clean soil used to solidified FCC Feed (Heavy Oil). This is not a soil excavation waste stream.
2. Material Composition and Contaminants: ☐ See Attached

1. FCC Feed	40-50 %
2. Clean Soil	50-60 %
3.	
4.	

Total comp. must be equal to or greater than 100% ≥100%
3. State Waste Codes: _____ ☒ N/A
4. Color: dark brown
5. Physical State at 70°F: ☒ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☒ N/A
7. pH: _____ to _____ ☒ N/A
8. Strong Odor: ☐ Yes ☒ No Describe: _____
9. Flash Point: ☐ <140°F ☐ 140°-199°F ☐ ≥200° ☒ N/A

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☒ Yes
Please identify applicable samples and/or lab reports:
Sample ID: Tank 714 FCC Feed Spill
2. Other information attached (such as MSDS)? ☒ Yes

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Beck Larsen Date: 2/26/16Title: Env. EngrCompany: Western Refining (Gallup)

Certification Signature

THINK GREEN:

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

Revised June 30, 2015
©2015 Waste Management**B. BILLING INFORMATION**☒ SAME AS GENERATOR

1. Billing Name: CHEMICAL TRANSPORTATION INC
2. Billing Address: 1945 E. Jackson Street
(City, State, ZIP) Phoenix AZ 85034
3. Contact Name: AP
4. Email: CT.AP@cti-az.com
5. Phone: (480) 784-4833 6. Fax: (602) 275-1666
7. WM Hauled? ☐ Yes ☒ No
8. P.O. Number: _____
9. Payment Method: ☒ Credit Account ☐ Cash ☐ Credit Card

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☒ No
Code: _____
2. State Hazardous Waste? ☐ Yes ☒ No
Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☒ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☒ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☒ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☒ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☒ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☒ No
*If Yes, see Addendum (page 2) for additional questions and space.
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No
a. Regulated by 40 CFR 761? ☐ Yes ☒ No
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☒ No
c. Were PCB imported into the US? ☐ Yes ☒ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No
11. Contains Asbestos? ☐ Yes ☒ No
→ If Yes: ☐ Non-Friable ☐ Non-Friable - Regulated ☐ Friable

F. SHIPPING AND DOT INFORMATION

1. ☒ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 1,000
☒ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 20 yard bins
4. USDOT Proper Shipping Name: _____ ☒ N/A



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

10th

Original
Ticket# 169726

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66593 Grid
Destination
PO
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 14:14:29	Scale1	ghunt		Tare	79080 lb
Out	03/16/2016 14:14:29		ghunt		Net	38600 lb
Comments					Tons	40480 lb
						20.24

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		20.24	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surchang 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		20.24	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66593

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL	442128AZ	Solidified FCC Feed	18	T	D - DRUM
				20.24	B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/16/17
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TAFOLAPHOENIX, AZ 85034Vehicle's No. 891/9925/BW # 1099

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/16/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



Painted Desert Landfills
9001 N. Porter
Joseph City, AZ, 86032
Ph: 929-288-3605

Original
Ticket# 169702

Customer Name CHEMICALTRANSPORTATION Chem Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 65500
Destination Grid
PG
Profile 4421200Z (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	70550 lb
In	03/16/2016 07:15:24	Scale1	ghunt		Tare	30500 lb
Out	03/16/2016 07:15:24		ghunt		Net	32060 lb
					Tons	16.03

Comments

Product	LD%	Qty	UCM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		16.03	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-AD&O Fee 100		16.03	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66590

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	18	16.03

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GravinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gravin
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TafuyaVehicle's No. 891/9925/BW # 930

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/16/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

10H

Original
Ticket# 169726

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66593 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 14:14:29	Scale1	ghunt		Tare	79080 lb
Out	03/16/2016 14:14:29		ghunt		Net	38600 lb
Comments					Tons	40480 lb
						20.24

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	20.24	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surchang	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	20.24	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66593

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1748I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL	442128AZ	Solidified FCC Feed	18	T	D - DRUM
				20.24	B - BAG
					C - CARTON
					T - TONS
					Y - YARDS
					O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/16/17
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TAFOLAPHOENIX, AZ 85034Vehicle's No. 891/9925/Bin # 1099

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/16/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169702

Customer Name CHEMICALTRANSPORTATION Chem Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 65500
Destination Grid
PO
Profile 4021289Z (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 07:15:24	Scales1	ghunt		Tare	70660 lb
Out	03/16/2016 07:15:24		ghunt		Net	38600 lb
					Tons	32060 lb

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.03	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.03	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66590

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.

WASTE DESCRIPTION

QUANTITY

UNITS

UNIT

PDL 442128AZ

Solidified FCC Feed

18

16.03

D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GravinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gravin
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE[Signature]
SIGNATURE

TRANSPORTER

CHEMICAL TRANSPORTATION, INC

480-784-4833

Name _____

Phone No. _____

1945 E. JACKSON STREET

Address _____

PHOENIX, AZ 85034

Driver's Name Abel TafuyaVehicle's No. 891/9925/BW # 930

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/16/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 929-288-3605

Original
Ticket# 169694

Customer Name CHEMICAL TRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/15/2016 Vehicle# 891 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Ben EPA ID
Manifest 66586 Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160 WESTERN REFINING GALLUP WESTERN REFINING SOUTHWEST GALLUP

Time	Scale	Operator	Inbound	Gross	
In 03/15/2016 14:54:59	Scale1	ghunt		Tare	73340 lb
Out 03/15/2016 14:54:59		ghunt		Net	38600 lb
				Tons	34740 lb
					17.37

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.37	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.37	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66586

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	18	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

17.37T

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Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE
SIGNATURE

CONTRACTOR

Name John GiviniPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givini
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Abel TAFOLAPHOENIX, AZ 85034Vehicle's No. 891/9925/BIN 1033

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATE
DRIVER'S SIGNATURE3/15/16
DELIVERY DATE
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/15/16
DATE
SIGNATURE



Painted Desert Landfill
9601 N. Porter
Joseph City, AZ, 86032
Ph: 928-888-3605

Original
Ticket# 169874

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/15/2016 Vehicle# 091 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA 10
Manifest 66582
Destination Grid
PO
Profile 4421288Z (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/15/2016 09:54:09	Scale1	ghunt		Tare	70280 15
Out	03/15/2016 09:54:09		ghunt		Net	38600 15
					Tons	15.84

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	15.84	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EUP-P-Standard Env	100		%				NM
5 ADE-ADEO Fee	100	15.84	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66582

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

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Beck Larsen

AUTHORIZED AGENT'S NAME (PRINT)

3/15/16

DATE

[Signature]

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-15-16

DATE

JOHN GIRVIN

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Abel TAFOLAVehicle's No. 891/9925/Bin #1198

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3/15/16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/15/16

DATE

[Signature]

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169695

Customer Name CHEMICAL TRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/15/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66587
Destination Grid
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/15/2016 15:06:38	Scale1	ghunt		Tare	69940.1b
Out	03/15/2016 15:30:14	Scale1	ghunt		Net	37400.1b
					Tons	32540.1b
						16.27

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		16.27	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		16.27	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66587

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	16.22T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)DATE 3/15/16SIGNATURE [Signature]

CONTRACTOR

Name John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)DATE 03-15-16SIGNATURE [Signature]

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Bene BarrigaVehicle's No. 921 / 9114 / 989 B.W. #

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

SHIPMENT DATE 03-15-16DRIVER'S SIGNATURE [Signature]DELIVERY DATE 3/15/16DRIVER'S SIGNATURE [Signature]

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)DATE 3/15/16SIGNATURE [Signature]



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169675

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CFI
Ticket Date 03/15/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66504
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGBMBGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/15/2016 09:38:00	Scale1	ghunt		Tare	73200 lb
Out	03/15/2016 10:22:07	Scale1	ghunt		Net	37800 lb
					Tons	35400 lb
						17.70

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.70	Tons				NM
2 PCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surchang	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.70	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66584

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-362-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u>	<u>442128AZ</u>	<u>18</u>	<u>T</u>	D - DRUM
<u> </u>	<u> </u>	<u> </u>	<u> </u>	B - BAG
<u> </u>	<u> </u>	<u> </u>	<u> </u>	C - CARTON
<u> </u>	<u> </u>	<u> </u>	<u> </u>	T - TONS
<u> </u>	<u> </u>	<u> </u>	<u> </u>	Y - YARDS
<u> </u>	<u> </u>	<u> </u>	<u> </u>	O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larson
AUTHORIZED AGENT'S NAME (PRINT)DATE 3/15/16SIGNATURE [Signature]

CONTRACTOR

Name John GrunPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Grun
AUTHORIZED AGENT'S NAME (PRINT)DATE 3-15-16SIGNATURE [Signature]

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1045 E. JACKSON STREETDriver's Name Rene BarrigaPHOENIX, AZ 85034Vehicle's No. 921/9114/Bus # 1100

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

SHIPMENT DATE 3-15-16DRIVER'S SIGNATURE [Signature]DELIVERY DATE 03/15/16DRIVER'S SIGNATURE [Signature]

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)DATE 3/15/16SIGNATURE [Signature]



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169729

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 921 Volume
Payment Type Credit:Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66592
Destination Grid
PO
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWOGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 14:47:01	Scale1	ghunt			69180 lb
Out	03/16/2016 14:47:01		ghunt		Tare	37400 lb
					Net	31780 lb
					Tons	15.89

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil/Sp. W.-T	100	15.89	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	15.89	Tons				NM

Total Tax
Total Ticket

Driver's Signature



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66592

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1749I.D. No. NM D000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
			15.89	B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Rene BarrigaVehicle's No. 921/9114 / Bin #1069

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/14/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



Maintained Desert Landfill
9001 N. Porter
Joseph City, AZ, 86022
Ph: 928-288-3605

Original
Ticket# 169705

Customer Name CHEMICAL TRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 921 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66588
Destination Grid
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 07:47:48	Scale1	ghunt		Tare	72240 lb
Out	03/16/2016 07:47:48		ghunt		Net	37400 lb
Comments					Tons	17.42

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.42	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.42	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66588

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u>	<u>442128AZ</u>	<u>18</u>	<u>T</u>	D - DRUM
				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Berk Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/14
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Rene BarrijaPHOENIX, AZ 85034Vehicle's No. 921/9114/Bins # 996

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3/16/16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-286-3605

Original
Ticket# 159583

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/15/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66585
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	72300 lb
In	03/15/2016 12:23:28	Scale1	ghunt		Tare	36940 lb
Out	03/15/2016 12:23:28		ghunt		Net	35360 lb
					Tons	17.68

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.68	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Burcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.68	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66585

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM D000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 44212BAZ	Solidified FCC Feed	18	T	D - DRUM
			17.68	B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

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Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GiviniPhone No. 520 780-6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.[Signature]
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATEJohn Givini
SIGNATURE

TRANSPORTER

CHEMICAL TRANSPORTATION, INC

480-784-4833

Name 1945 E. JACKSON STREET

Phone No. _____

Address PHOENIX, AZ 85034Driver's Name James HawleyVehicle's No. 920/9500/Bin # 985

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATEJames Hawley
DRIVER'S SIGNATURE3-15-16
DELIVERY DATEJames Hawley
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FURNITURE WASTE

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66585

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1740I.D. No. NM D000333771

PROFILE APPROVAL NO.

WASTE DESCRIPTION

QUANTITY

UNITS

UNIT

PDL 442128AZ

Solidified FCC Feed

18

T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261; That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larson
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GianniniPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

[Signature]
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE[Signature]
SIGNATURE

TRANSPORTER

CHEMICAL TRANSPORTATION, INC

Name 1945 E. JACKSON STREETPhone No. 480-784-4833Address PHOENIX, AZ 85034Driver's Name James HawleyVehicle's No. 920/9500/Bin # 985

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-15-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
5001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169747

Customer Name CHEMICAL TRANSPORTATION Chem Carrier CTI CTI
Ticket Date 03/17/2016 Vehicle# 921
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66597
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

Volume

	Time	Scale	Operator	Inbound	Gross	
In	03/17/2016 10:27:26	Scale1	ghunt			68560 lb
Out	03/17/2016 10:27:26		ghunt		Tare	37420 lb
					Net	31160 lb
					Tons	15.58

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W. -T	100	15.58	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	15.58	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66597

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1749I.D. No. NM000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
			15.58	B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

03-16-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-16-16

DATE

John Girvin

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name Rene BarriacPHOENIX, AZ 85034Vehicle's No. 921/9114/Bin #1203

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16

SHIPMENT DATE

Robert

DRIVER'S SIGNATURE

03/17/16

DELIVERY DATE

Robert

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/17/16

DATE

Gary Hunt

SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66597**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1748I.D. No. NMD000333271**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**PDL 442128AZSolidified FCC Feed18TID - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER1558

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Alvin Doisey

AUTHORIZED AGENT'S NAME (PRINT)

03-16-16

DATE

Alvin Doisey

SIGNATURE

CONTRACTORName John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

03-16-16

DATE

John Girvin

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name Renie BagginsVehicle's No. 921/9114/BW #1203

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16

SHIPMENT DATE

Renie Baggins

DRIVER'S SIGNATURE

03/16/16

DELIVERY DATE

Renie Baggins

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/17/16

DATE

GARY HUNT

SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

10#

Original
Ticket# 169732

Customer Name: CHEMICALTRANSPORTATION Chemis Carrier: CTI CTI
Ticket Date: 03/17/2016 Vehicle#: 920 20s Volume
Payment Type: Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing #: 0000415
State Waste Code Gen EPA ID
Manifest: 66596
Destination Grid
PO
Profile: 442126AZ (SOLIDIFIED FCC FEED)
Generator: 160-WESTERNREFININGSWALLUP WESTERN REFINING SOUTHWEST WALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/17/2016 07:03:04	Scale1	ghunt		Tare	75900 lb
Out	03/17/2016 07:03:04		ghunt		Net	38940 lb
					Tons	38960 lb
						19.48

Comments

Product	LD%	Qty	LDN	Rate	Amount	Origin
1 Cont Soil Sp. W.-T 100		19.48	Tons			
2 RCR-P-Regulatory C 100			%			NM
3 FUEL-Fuel Surchar 100			%			NM
4 EVF-P-Standard Env 100			%			NM
5 ADE-ADEQ Fee 100		19.48	Tons			NM

Total Tax
Total Ticket

Driver's Signature

James Hantz



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66596

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T 19.48	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-16-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GivenPhone No. 520 780 6138Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.John Given03-16-16John Given

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HAULEYPHOENIX, AZ 85034Vehicle's No. 920/9500/Bin #870

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16

SHIPMENT DATE

James Hauley

DRIVER'S SIGNATURE

3-17-16

DELIVERY DATE

James Hauley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/17/16

DATE

Gary Hunt

SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66596

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 38

Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-962-1740I.D. No. NMD000333771

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>POL</u>	<u>Solvent FCC Feed</u>	<u>18</u>	<u>1948</u>	D - DRUM
<u>442136AZ</u>				B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATEAlvin Dorsey
SIGNATURE

CONTRACTOR

Name John G. SmithPhone No. 570 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John G. Smith
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATEJohn G. Smith
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/BW-4870

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATEJames Hawley
DRIVER'S SIGNATURE3-17-16
DELIVERY DATEJames Hawley
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/17/16
DATEGary Hunt
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 920-288-3605

Original
Ticket# 169755

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/17/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66599
Destination Direct Landfill Grid
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWBALLUP WESTERN REFINING SOUTHWEST BALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/17/2016 12:24:23	Scale1	Orlando		Tare	76621 lb
Out	03/17/2016 12:24:23		Orlando		Net	57100 lb
					Tons	25.25

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		18.84	Tons				NM
2 RCR-P-Regulatory C 100			%				
3 FUEL-Fuel Surcharg 100			%				
4 EVF-P-Standard Env 100			%				
5 ADE-ADEQ Fee 100		18.84	Tons				

Total Tax
Total Ticket

Driver's Signature

James Hanzel





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66599

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM D000333221

PROFILE APPROVAL NO.

WASTE DESCRIPTION

QUANTITY

UNITS

UNIT

PDL 442128AZ

Solidified FCC Feed

18

T

D - DRUM

B - BAG

C - CARTON

~~TONS~~

Y - YARDS

O - OTHER

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ALVIN DORSEY03-17-16Alvin Dorsey

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780-6138

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-17-16John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

CHEMICAL TRANSPORTATION, INC

480-784-4833

Name _____

Phone No. _____

Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/BIN # 952

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-17-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-17-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Orlando Sierra

NAME (PRINT)

3-17-16

DATE

Orlando Sierra

SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST 020**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66599

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39

I-40 @ Exit 39

Jamestown, NM 87347

Jamestown, NM 87347

Phone No. 505-862-1749

I.D. No. NM D000333721

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
PDL 442128AZ	Solidified FCC Feed	18	T
		18.84	

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DOISEY
AUTHORIZED AGENT'S NAME (PRINT)

03-17-16
DATE

[Signature]
SIGNATURE

CONTRACTOR

Name John Gavin

Phone No. 520 780 6138

Address _____
I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Gavin
AUTHORIZED AGENT'S NAME (PRINT)

03-17-16
DATE

[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INC

Phone No. 480-784-4833

Address 1245 E. JACKSON STREET
PHOENIX, AZ 85034

Driver's Name JAMES HAWLEY

Vehicle's No. 920/9500/BIN # 952

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-17-16
SHIPMENT DATE

[Signature]
DRIVER'S SIGNATURE

3-17-16
DELIVERY DATE

[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]
NAME (PRINT)

3-17-16
DATE

[Signature]
SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169700

Customer Name CHEMICALTRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66591 Grid
Destination
PO
Profile 442129AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW6GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 07:04:11	Scale1	ghunt		Tare	71100 lb 36940 lb
Out	03/16/2016 07:04:11		ghunt		Net	34160 lb
					Tons	17.08

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1. Cont Soil Sp. W.-T 100		17.08	Tons				NM
2. RCR-P-Regulatory C 100			%				NM
3. FUEL-Fuel Surcharg 100			%				NM
4. EVF-P-Standard Env 100			%				NM
5. ADE-ADEB Fee 100		17.08	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66591

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T 17.08	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Brck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name 920/9500 / Bm # 845Vehicle's No. JAMES HAWLEY

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-16-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66591

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 29I-40 @ Exit 29Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-262-1740I.D. No. NM000333271

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T	D - DRUM
			17.08	B - BAG
				C - CARTON
				T - TONS
				Y - YARDS
				O - OTHER

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Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/15/16
DATE

SIGNATURE

CONTRACTORName John GivinsPhone No. 520 780 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givins
AUTHORIZED AGENT'S NAME (PRINT)03-15-16
DATE

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name 920/9500/Bm H 845PHOENIX, AZ 85034Vehicle's No. JAMES HAWLEY

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-15-16
SHIPMENT DATEJames Hawley
DRIVER'S SIGNATURE3-16-16
DELIVERY DATEJames Hawley
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE

SIGNATURE

ORIGINAL - WHITE

DISPOSAL FACILITY - YELLOW

TRANSPORTER - PINK

GENERATOR - GOLDENROD



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169718

Customer Name CHEMICALTRANSPORTATION Chemio Carrier CTI CTI
Ticket Date 03/16/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66394
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 180-WESTERNREFININGSSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/16/2016 12:14:23	Scale1	ghunt		Tare	61480 lb
Out	03/16/2016 12:14:23		ghunt		Net	36940 lb
					Tons	24540 lb
						12.27

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	12.27	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	12.27	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James Hunt





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66594

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	<u>D - DRUM</u>
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>B - BAG</u>
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>C - CARTON</u>
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>T - TONS</u>
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>Y - YARDS</u>
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>O - OTHER</u>

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Back Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/BIN # 754

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-16-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66594**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-802-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.		WASTE DESCRIPTION	QUANTITY	UNITS
PDL	442123AZ	Solidified FCC Feed	18	T
				12.27

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-16-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1045 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/BW/H 754

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-16-16
SHIPMENT DATEJames Hawley
DRIVER'S SIGNATURE3-16-16
DELIVERY DATEJames Hawley
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/16/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 163659

Customer Name CHEMICALTRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/15/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66583
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	71000 lb
In	03/15/2016 07:05:17	Scale1	ghunt		Tare	36940 lb
Out	03/15/2016 07:05:17		ghunt		Net	34060 lb
					Tons	17.03

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.03	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.03	Tons				NM

Total Tax
Total Ticket

Driver's Signature *James Hansen*





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66583

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NM000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	T 17.03	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY03-14-16Alvin R

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520 780 - 6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-14-16John Girvin

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/Bin # 947

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-14-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-15-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT

NAME (PRINT)

3/15/16

DATE

Gary Hunt

SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66583

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333771

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS
<u>PDL</u> <u>4421128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u> <u>17.03</u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY
AUTHORIZED AGENT'S NAME (PRINT)03-14-16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GrevinPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Grevin
AUTHORIZED AGENT'S NAME (PRINT)03-14-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/Bus # 947

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-14-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-15-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/15/16
DATE[Signature]
SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169631

Customer Name CHEMICALTRANSPORTATION Chemi Carrier CTI CTI
Ticket Date 03/14/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00000415
State Waste Code Gen EPA ID
Manifest 66580
Destination Grid
PO
Profile 44212BAZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/14/2016 07:03:20	Scale1	ghunt		Tare	69660 lb
Out	03/14/2016 07:03:20		ghunt		Net	36940 lb
Comments					Tons	32720 lb
						16.36

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.36	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.36	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James H. Hunt



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66580

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
PDL 442128AZ	Solidified FCC Feed	18	16.36T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/11/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-11-16
DATE[Signature]
SIGNATURE

TRANSPORTER

CHEMICAL TRANSPORTATION, INC

480-784-4833

Name _____

Phone No. _____

1845 E. JACKSON STREET

Address _____

Driver's Name JAMES HAWLEY

PHOENIX, AZ 85034

Vehicle's No. 920/9500/Bin# 960

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-11-16
SHIPMENT DATEJames Hawley
DRIVER'S SIGNATURE3-14-16
DELIVERY DATEJames Hawley
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/14/16
DATE[Signature]
SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66580

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-662-1740I.D. No. NM1500033321

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>16.36T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>				

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Back Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/11/16
DATE[Signature]
SIGNATURE

CONTRACTOR

Name John GivensPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givens
AUTHORIZED AGENT'S NAME (PRINT)03-11-16
DATE[Signature]
SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1245 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/BW# 9160

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-11-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-14-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT
NAME (PRINT)3/14/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169645

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/14/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66581 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/14/2016 12:35:15	Scale1	ghunt		Tare	72580 lb
Out	03/14/2016 12:35:15		ghunt		Net	36940 lb
					Tons	35640 lb
						17.82

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.82	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	17.82	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST 020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66581

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>FDL</u> <u>442123AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Ed Riege3-14-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GirvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin03-14-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/Bin # 1019

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-14-16[Signature]3-14-16[Signature]

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

☐

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

GARY HUNT3/14/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

NON-HAZARDOUS
WASTE MANIFEST

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR

WM- 66581

Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 38I-40 @ Exit 38Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1749I.D. No. NmD000333771

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
POL 442123AZ	Solidified FCC Feed	18	17.82T	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Ed Riege3-14-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

CONTRACTOR

Name John GivensPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givens03-14-16[Signature]

AUTHORIZED AGENT'S NAME (PRINT)

DATE

SIGNATURE

TRANSPORTER

Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 920/9500/Built # 1019

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-14-16James Hawley3-14-16James Hawley

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

CARY HUNT3/14/16[Signature]

NAME (PRINT)

DATE

SIGNATURE



9901 N. Porter
Joseph City, AZ, 86032
Ph: 928-299-3605

Ticket# 169597

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/11/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000413
State Waste Code Gen EPA ID
Manifest 66577
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 150-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/11/2016 07:04:51	Scale1	paty			67820 lb
Out	03/11/2016 07:04:51		paty		Tare	36940 lb
					Net	30880 lb
					Tons	15.44

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T 100		15.44	Tons				NM
2 RCR-P-Regulatory C 100			%				NM
3 FUEL-Fuel Surcharg 100			%				NM
4 EVF-P-Standard Env 100			%				NM
5 ADE-ADEQ Fee 100		15.44	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66577**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-262-1749I.D. No. NM A000333221

PROFILE APPROVAL NO.	WASTE DESCRIPTION	QUANTITY	UNITS	UNIT
<u>PDL</u> <u>442128AZ</u>	<u>Solidified FCC Feed</u>	<u>18</u>	<u>T</u>	D - DRUM B - BAG C - CARTON T - TONS Y - YARDS O - OTHER
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> <u> </u>	<u> </u>	<u> </u>	<u> </u>	

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY
AUTHORIZED AGENT'S NAME (PRINT)03-10-13
DATEAlvin Dorsey
SIGNATURE**CONTRACTOR**Name John GivvinPhone No. 520-780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givvin
AUTHORIZED AGENT'S NAME (PRINT)03-10-16
DATEJohn Givvin
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1945 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920 / 9500 / Bin # 998

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-10-16
SHIPMENT DATEJames Hawley
DRIVER'S SIGNATURE_____
DELIVERY DATE_____
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Patty Workman
NAME (PRINT)3/11/16
DATEPatty Workman
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169619

Customer Name CHEMICAL TRANSPORTATION Chemis Carrier CTI CTI
Ticket Date 03/11/2016 Vehicle# 920 20L Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66579
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERN REFINING SW GALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/11/2016 12:22:21	Scale1	paty		Tare	55560 lb
Out	03/11/2016 12:22:21		paty		Net	36940 lb
					Tons	18620 lb
Comments						9.31

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	9.31	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	9.31	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

020

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66579**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-862-1749I.D. No. NMD000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**

PDL	4	4	2	1	2	8	A	Z
-----	---	---	---	---	---	---	---	---

Solidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Bark Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/11/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GivvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Givvin
AUTHORIZED AGENT'S NAME (PRINT)03-11-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETPHOENIX, AZ 85034Driver's Name JAMES HAWLEYVehicle's No. 970/9500/BIN #1092

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-11-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-11-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

[Signature]
NAME (PRINT)3/11/16
DATE[Signature]
SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 169583

Customer Name CHEMICALTRANSPORTATION Chemie Carrier CTI CTI
Ticket Date 03/10/2016 Vehicle# 920 20L Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 00008415
State Waste Code Gen EPA ID
Manifest 66575
Destination Grid
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/10/2016 12:23:39	Scale1	paty			57240 lb
Out	03/10/2016 12:23:39		paty		Tare	36940 lb
					Net	20300 lb
					Tons	10.15

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. N.-T	100	10.15	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADED Fee	100	10.15	Tons				NM

Total Tax
Total Ticket

Driver's Signature





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66575**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 39I-40 @ Exit 39Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-362-1749I.D. No. NM1000338221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**POL 442128AZSolidified FCC Feed18T

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen
AUTHORIZED AGENT'S NAME (PRINT)3/10/16
DATE[Signature]
SIGNATURE**CONTRACTOR**Name John GirvinPhone No. 520 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Girvin
AUTHORIZED AGENT'S NAME (PRINT)03-10-16
DATE[Signature]
SIGNATURE**TRANSPORTER**Name CHEMICAL TRANSPORTATION, INCPhone No. 480-764-4833Address 1845 E. JACKSON STREETDriver's Name James HawleyPHOENIX, AZ 85034Vehicle's No. 970/9500/ Bin #1203

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-10-16
SHIPMENT DATE[Signature]
DRIVER'S SIGNATURE3-10-16
DELIVERY DATE[Signature]
DRIVER'S SIGNATURE**DISPOSAL FACILITY**

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Felix Weatherford
NAME (PRINT)3/10/16
DATE[Signature]
SIGNATURE



9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

10/1

Ticket# 169362

Customer Name CHEMICALTRANSPORTATION Chemico Carrier CTI CTI
Ticket Date 03/10/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66574 Grid
PG
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/10/2016 07:07:29	Scale1	paty		Tare	62400 lb 36940 lb
Out	03/10/2016 07:07:29		paty		Net	25460 lb
					Tons	12.73

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	12.73	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Burcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	12.73	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James Hunsy





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66574**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 30I-40 @ Exit 30Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1740I.D. No. NMD000333221

PROFILE APPROVAL NO.			WASTE DESCRIPTION	QUANTITY	UNITS
P D E			Solidified FCC Feed	18	T
				12.73	T

UNIT
D - DRUM
B - BAG
C - CARTON
T - TONS
Y - YARDS
O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

Beck Larsen

AUTHORIZED AGENT'S NAME (PRINT)

3/9/16

DATE

[Signature]

SIGNATURE

CONTRACTORName John GivonPhone No. 520 780 6138

Address _____

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John Givon

AUTHORIZED AGENT'S NAME (PRINT)

03-09-16

DATE

[Signature]

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/13m + 960

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law: That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-09-16

SHIPMENT DATE

[Signature]

DRIVER'S SIGNATURE

3-10-16

DELIVERY DATE

[Signature]

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Taty Weatherford

NAME (PRINT)

3/10/16

DATE

[Signature]

SIGNATURE



3001 N. Portman
Joseph City, AZ, 85032
Ph: 928-288-3605

Ticket# 125533

Customer Name CHEMICALTRANSPORTATION Chemip Carrier CTI CTI
Ticket Date 03/09/2016 Vehicle# 920 20L Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66570
Destination Grid
PG
Profile 442120AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/09/2016 07:05:39	Scale1	paty		Tare	69200 lb 36940 lb
Out	03/09/2016 07:30:52	Scale1	paty		Net	32260 lb
					Tons	16.13

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	16.13	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	16.13	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James H. Hays





PLEASE CALL LANDFILL 24 HRS. IN ADVANCE WITH SHIPPING NOTICE.

**NON-HAZARDOUS
WASTE MANIFEST**

FOR OFFICE USE ONLY

Customer Acct. No. _____

Ticket No. _____

GENERATOR**WM- 66570**Name Western Refining Southwest, Inc. - Gallup

Generating Location _____

Address I-40 @ Exit 38I-40 @ Exit 38Jamestown, NM 87347Jamestown, NM 87347Phone No. 505-882-1740I.D. No. NM D000333221**PROFILE APPROVAL NO.****WASTE DESCRIPTION****QUANTITY****UNITS****UNIT**FDL 442128AZSolidified FCC Feed13

D - DRUM

B - BAG

C - CARTON

T - TONS

Y - YARDS

O - OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261; That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

ALVIN DORSEY

AUTHORIZED AGENT'S NAME (PRINT)

03-08-16

DATE

Alvin Dorsey

SIGNATURE

CONTRACTORName John GiziwPhone No. 570 780-6138

Address _____

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law; That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

John Giziw

AUTHORIZED AGENT'S NAME (PRINT)

03-08-16

DATE

John Giziw

SIGNATURE

TRANSPORTERName CHEMICAL TRANSPORTATION, INCPhone No. 480-784-4833Address 1845 E. JACKSON STREETDriver's Name JAMES HAWLEYPHOENIX, AZ 85034Vehicle's No. 920/9500/B.W. #1198

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40CFR Part 261 or any applicable state law; That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

03-08-16

SHIPMENT DATE

James Hawley

DRIVER'S SIGNATURE

3-9-16

DELIVERY DATE

James Hawley

DRIVER'S SIGNATURE

DISPOSAL FACILITY

- ☐ BUTTERFIELD STATION FACILITY • 40404 South 99th Avenue • Mobile, Arizona 85239 • (602) 256-0630
- ☐ NORTHWEST REGIONAL LANDFILL • 19401 West Deer Valley Road • Surprise, Arizona 85387 • (623) 584-6055
- ☒ PAINTED DESERT LANDFILL • 9001 North Porter Avenue • Joseph City, Arizona 86032 • (928) 288-3605
- ☐ GRAY WOLF LANDFILL • 23355 East Highway 169 • Mile Post 11 • Dewey, Arizona 86327 • (928) 925-6249
- ☐ MARANA REGIONAL LANDFILL • 14508 West Avra Valley Road • Marana, Arizona 85653 • (520) 471-7682

I hereby certify that the above material has been accepted and that information presented on this document are true and accurate.

Felix Weathered

NAME (PRINT)

3/9/16

DATE

Felix Weathered

SIGNATURE



Painted Desert Landfill
9001 N. Porter
Joseph City, AZ, 86032
Ph: 928-288-3605

Original
Ticket# 107300

Customer Name CHEMICALTRANSPORTATION Chemic Carrier CTI CTI
Ticket Date 03/09/2016 Vehicle# 920 20s Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000415
State Waste Code Gen EPA ID
Manifest 66572 Grid
Destination
PO
Profile 442128AZ (SOLIDIFIED FCC FEED)
Generator 160-WESTERNREFININGSWGALLUP WESTERN REFINING SOUTHWEST GALLUP

	Time	Scale	Operator	Inbound	Gross	
In	03/09/2016 13:06:17	Scale1	paty		Tare	72420 lb
Out	03/09/2016 13:06:17		paty		Net	36940 lb
					Tons	35480 lb
						17.74

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Sp. W.-T	100	17.74	Tons				NM
2 RCR-P-Regulatory C	100		%				NM
3 FUEL-Fuel Surcharg	100		%				NM
4 EVF-P-Standard Env	100		%				NM
5 ADE-ADEQ Fee	100	17.74	Tons				NM

Total Tax
Total Ticket

Driver's Signature

James Hansen



Appendix C
Safety Data Sheet – FCC Feed

SAFETY DATA SHEET

Cat Cracked Distillate, Heavy



Section 1. Identification

GHS product identifier : Cat Cracked Distillate, Heavy
Chemical name : Distillates (petroleum), heavy catalytic cracked
Other means of identification : FCC Heavy Cycle Oil, HCO, Cat Cracked Gas Oil, Heavy Cat Gas Oil

Relevant identified uses of the substance or mixture and uses advised against

Not available.

Supplier's details : Western Refining Company LP
 123 W. Mills Avenue
 El Paso, TX 79901
 Tel: 915-534-1488

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3877 (24/7)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
 CARCINOGENICITY - Category 1B

GHS label elements

Hazard pictograms :



Signal word : Danger
Hazard statements : Combustible liquid.
 May cause cancer.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. - No smoking.
Response : IF exposed or concerned: Get medical attention.
Storage : Store locked up. Store in a well-ventilated place. Keep cool.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Substance
Chemical name : Distillates (petroleum), heavy catalytic cracked
Other means of identification : FCC Heavy Cycle Oil, HCO, Cat Cracked Gas Oil, Heavy Cat Gas Oil

CAS number/other identifiers

CAS number : 64741-61-3
Product code : Not available.

Ingredient name	%	CAS number
Distillates (petroleum), heavy catalytic cracked	100	64741-61-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur.
Skin contact : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray or foam.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Combustible liquid.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

- Hygiene measures** : Appropriate techniques should be used to remove potentially contaminated clothing. IF ON SKIN (or hair): Wash contaminated clothing before reuse.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Brown to black.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : $>-10^{\circ}\text{C}$ ($>14^{\circ}\text{F}$)
- Boiling point** : 204.44 to 426.67°C (400 to 800°F)
- Flash point** : Closed cup: 65.556 to 93.333°C (150 to 200°F)
Open cup: $>115.56^{\circ}\text{C}$ ($>240^{\circ}\text{F}$) [Cleveland.]
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1%
Upper: 6%
- Vapor pressure** : <0.13 kPa (<1 mm Hg) [room temperature]
- Vapor density** : Not available.
- Relative density** : 0.97 to 0.99
- Solubility** : Soluble in hydrocarbon solvents; insoluble in water.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 371°C (699.8°F)
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.205 cm^2/s (>20.5 cSt)

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Section 11. Toxicological information

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

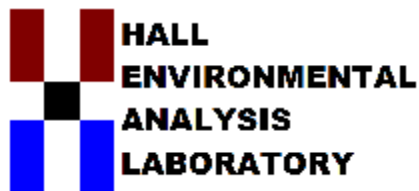
Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid

Appendix D

Analytical Data Reports



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

February 23, 2016

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

RE: Tank 714 FCC Feed Spill

OrderNo.: 1602354

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/9/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued February 17, 2016.

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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602354

Date Reported: 2/23/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Feed Spill

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 1:00:00 PM

Lab ID: 1602354-001

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: pmf
Mercury	ND	0.020		mg/L	1	2/12/2016 10:17:19 AM	23694
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Barium	ND	100		mg/L	1	2/12/2016 9:54:42 AM	23696
Cadmium	ND	1.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Chromium	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Lead	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Selenium	ND	1.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Silver	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	39000	990		mg/Kg	100	2/19/2016 5:57:41 PM	23832
Motor Oil Range Organics (MRO)	45000	5000		mg/Kg	100	2/19/2016 5:57:41 PM	23832
Surr: DNOP	0	70-130	S	%Rec	100	2/19/2016 5:57:41 PM	23832
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	170	48		mg/Kg	10	2/22/2016 10:28:16 AM	23846
Surr: BFB	153	66.2-112	S	%Rec	10	2/22/2016 10:28:16 AM	23846
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.24	0.19		mg/Kg	10	2/22/2016 10:28:16 AM	23846
Toluene	2.9	0.48		mg/Kg	10	2/22/2016 10:28:16 AM	23846
Ethylbenzene	2.3	0.48		mg/Kg	10	2/22/2016 10:28:16 AM	23846
Xylenes, Total	12	0.96		mg/Kg	10	2/22/2016 10:28:16 AM	23846
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	10	2/22/2016 10:28:16 AM	23846
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
3+4-Methylphenol	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
Phenol	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
2,4-Dinitrotoluene	ND	0.13		mg/L	1	2/16/2016 1:45:28 PM	23755
Hexachlorobenzene	ND	0.13		mg/L	1	2/16/2016 1:45:28 PM	23755
Hexachlorobutadiene	ND	0.50		mg/L	1	2/16/2016 1:45:28 PM	23755
Hexachloroethane	ND	3.0		mg/L	1	2/16/2016 1:45:28 PM	23755
Nitrobenzene	ND	2.0		mg/L	1	2/16/2016 1:45:28 PM	23755
Pentachlorophenol	ND	100		mg/L	1	2/16/2016 1:45:28 PM	23755
Pyridine	ND	5.0		mg/L	1	2/16/2016 1:45:28 PM	23755
2,4,5-Trichlorophenol	ND	400		mg/L	1	2/16/2016 1:45:28 PM	23755
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	2/16/2016 1:45:28 PM	23755
Cresols, Total	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
Surr: 2-Fluorophenol	77.0	19-121		%Rec	1	2/16/2016 1:45:28 PM	23755

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602354

Date Reported: 2/23/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Feed Spill

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 1:00:00 PM

Lab ID: 1602354-001

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: Phenol-d5	71.7	31.8-117		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: 2,4,6-Tribromophenol	104	31.3-139		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: Nitrobenzene-d5	99.0	48.2-128		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: 2-Fluorobiphenyl	97.8	58.4-114		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: 4-Terphenyl-d14	98.5	17.4-141		%Rec	1	2/16/2016 1:45:28 PM	23755
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF
Benzene	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
2-Butanone	ND	200		ppm	10	2/11/2016 1:07:11 PM	23666
Carbon tetrachloride	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
Chlorobenzene	ND	100		ppm	10	2/11/2016 1:07:11 PM	23666
Chloroform	ND	6.0		ppm	10	2/11/2016 1:07:11 PM	23666
1,4-Dichlorobenzene	ND	7.5		ppm	10	2/11/2016 1:07:11 PM	23666
1,1-Dichloroethene	ND	0.70		ppm	10	2/11/2016 1:07:11 PM	23666
Tetrachloroethene (PCE)	ND	0.70		ppm	10	2/11/2016 1:07:11 PM	23666
Trichloroethene (TCE)	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
Vinyl chloride	ND	0.20		ppm	10	2/11/2016 1:07:11 PM	23666
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666
Surr: Dibromofluoromethane	99.5	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666
Surr: Toluene-d8	104	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602354

Date Reported: 2/23/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Product

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 4:25:00 PM

Lab ID: 1602354-002

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: pmf
Mercury	ND	0.020		mg/L	1	2/12/2016 10:22:59 AM	23694
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Barium	ND	100		mg/L	1	2/12/2016 9:55:56 AM	23696
Cadmium	ND	1.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Chromium	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Lead	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Selenium	ND	1.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Silver	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	270000	9700		mg/Kg	100	2/19/2016 6:41:00 PM	23832
Motor Oil Range Organics (MRO)	310000	49000		mg/Kg	100	2/19/2016 6:41:00 PM	23832
Surr: DNOP	0	70-130	S	%Rec	100	2/19/2016 6:41:00 PM	23832
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	980	480		mg/Kg	10	2/22/2016 10:51:58 AM	23846
Surr: BFB	140	66.2-112	S	%Rec	10	2/22/2016 10:51:58 AM	23846
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.9		mg/Kg	10	2/22/2016 10:51:58 AM	23846
Toluene	14	4.8		mg/Kg	10	2/22/2016 10:51:58 AM	23846
Ethylbenzene	9.4	4.8		mg/Kg	10	2/22/2016 10:51:58 AM	23846
Xylenes, Total	51	9.6		mg/Kg	10	2/22/2016 10:51:58 AM	23846
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	10	2/22/2016 10:51:58 AM	23846
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
3+4-Methylphenol	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
Phenol	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
2,4-Dinitrotoluene	ND	0.13		mg/L	1	2/16/2016 1:15:23 PM	23755
Hexachlorobenzene	ND	0.13		mg/L	1	2/16/2016 1:15:23 PM	23755
Hexachlorobutadiene	ND	0.50		mg/L	1	2/16/2016 1:15:23 PM	23755
Hexachloroethane	ND	3.0		mg/L	1	2/16/2016 1:15:23 PM	23755
Nitrobenzene	ND	2.0		mg/L	1	2/16/2016 1:15:23 PM	23755
Pentachlorophenol	ND	100		mg/L	1	2/16/2016 1:15:23 PM	23755
Pyridine	ND	5.0		mg/L	1	2/16/2016 1:15:23 PM	23755
2,4,5-Trichlorophenol	ND	400		mg/L	1	2/16/2016 1:15:23 PM	23755
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	2/16/2016 1:15:23 PM	23755
Cresols, Total	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
Surr: 2-Fluorophenol	77.0	19-121		%Rec	1	2/16/2016 1:15:23 PM	23755

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602354

Date Reported: 2/23/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Product

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 4:25:00 PM

Lab ID: 1602354-002

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: Phenol-d5	71.4	31.8-117		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: 2,4,6-Tribromophenol	98.6	31.3-139		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: Nitrobenzene-d5	88.9	48.2-128		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: 2-Fluorobiphenyl	89.8	58.4-114		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: 4-Terphenyl-d14	96.5	17.4-141		%Rec	1	2/16/2016 1:15:23 PM	23755
VOLATILES BY 8260B/1311							Analyst: DJF
Benzene	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
2-Butanone	ND	200		mg/L	1	2/12/2016 2:06:32 PM	23698
Carbon Tetrachloride	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
Chlorobenzene	ND	100		mg/L	1	2/12/2016 2:06:32 PM	23698
Chloroform	ND	6.0		mg/L	1	2/12/2016 2:06:32 PM	23698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	2/12/2016 2:06:32 PM	23698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
1,1-Dichloroethene	ND	0.70		mg/L	1	2/12/2016 2:06:32 PM	23698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	2/12/2016 2:06:32 PM	23698
Trichloroethene (TCE)	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
Vinyl chloride	ND	0.20		mg/L	1	2/12/2016 2:06:32 PM	23698
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698
Surr: Dibromofluoromethane	101	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698
Surr: Toluene-d8	101	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698

Refer to the QC Summary report and 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



Trust our People. Trust our Data.

40418 2.30.17

Billings, MT 800.735.4489 • Casper, WY 888.235.0515

College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B16020920-001
Client Sample ID: 1602354-001B, Tank 714 FCC Feed Spill

Report Date: 02/17/16
Collection Date: 02/08/16 13:00
Date Received: 02/11/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
IGNITABILITY							
Flash Point (Ignitability)	>200	°F		30		SW1010M	02/12/16 13:30 / jh
CORROSIVITY							
pH of Soil and Waste	8.1	s.u.		0.1		SW9045D	02/12/16 10:26 / jh
REACTIVITY							
Cyanide, Reactive	ND	mg/kg		0.05	250	SW846 Ch 7	02/16/16 16:09 / jpv
Sulfide, Reactive	ND	mg/kg		20	500	SW846 Ch 7	02/12/16 12:05 / jh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Trust our People. Trust our Data.

Billings, MT 800.735.4489

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B16020920-002
Client Sample ID: 1602354-002B, Tank 714 FCC Product

Report Date: 02/17/16
Collection Date: 02/08/16 16:25
Date Received: 02/11/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
IGNITABILITY							
Flash Point (Ignitability)	>200	°F		30		SW1010M	02/12/16 13:30 / jh
CORROSIVITY							
pH of Soil and Waste	7.2	s.u.		0.1		SW9045D	02/12/16 10:26 / jh
REACTIVITY							
Cyanide, Reactive	ND	mg/kg		0.05	250	SW846 Ch 7	02/16/16 16:17 / jpv
Sulfide, Reactive	ND	mg/kg		20	500	SW846 Ch 7	02/12/16 12:05 / jh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Report Date: 02/17/16

Project: Not Indicated

Work Order: B16020920

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW1010M							Batch: R256485		
Lab ID: LCS-R256485	Laboratory Control Sample				Run: PENSKY MARTEN CLOSED			02/12/16 13:30	
Flash Point (Ignitability)	88.0	°F	30	98	98	102			
Lab ID: LCSDUP-R256485	Laboratory Control Sample Duplicate				Run: PENSKY MARTEN CLOSED			02/12/16 13:30	
Flash Point (Ignitability)	88.0	°F	30	98	98	102			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Project: Not Indicated

Report Date: 02/17/16

Work Order: B16020920

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW846 Ch 7 Batch: 96345									
Lab ID: LCS-96345	Laboratory Control Sample				Run: REACTIVE SULFIDE/CYANID		01/20/16 15:00		
Sulfide, Reactive	34	mg/kg	20	109	70	130			
Lab ID: B16011154-001ADUP	Sample Duplicate				Run: REACTIVE SULFIDE/CYANID		01/20/16 15:00		
Sulfide, Reactive	ND	mg/kg	20					10	
Method: SW846 Ch 7 Batch: 96345									
Lab ID: MB-96345	Method Blank				Run: REACTIVE SULFIDE/CYANID		02/12/16 12:05		
Sulfide, Reactive	ND	mg/kg	10						
Method: SW846 Ch 7 Batch: 96345									
Lab ID: MB-96345	Method Blank				Run: SFA-201-B_160216A		02/16/16 16:06		
Cyanide, Reactive	ND	mg/kg	0.05						
Lab ID: B16020920-001AMS	Sample Matrix Spike				Run: SFA-201-B_160216A		02/16/16 16:11		
Cyanide, Reactive	0.11	mg/kg	0.050	108	80	120			
Lab ID: B16020920-001AMSD	Sample Matrix Spike Duplicate				Run: SFA-201-B_160216A		02/16/16 16:14		
Cyanide, Reactive	0.11	mg/kg	0.050	106	80	120	2.2	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Project: Not Indicated

Report Date: 02/17/16

Work Order: B16020920

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW9045D					Analytical Run: ORION 720A HZW_160212A				
Lab ID: ICV	Initial Calibration Verification Standard								02/12/16 10:26
pH of Soil and Waste	7.96	s.u.	0.10	100	98	102			
Method: SW9045D					Batch: R256459				
Lab ID: B16020920-001ADUP	Sample Duplicate								02/12/16 10:26
pH of Soil and Waste	8.34	s.u.	0.10				2.6	3	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	LCS-23832		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 23832		RunNo: 32255					
Prep Date:	2/19/2016		Analysis Date: 2/19/2016		SeqNo: 986191		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.6	65.8	136			
Surr: DNOP	4.8		5.000		95.1	70	130			

Sample ID	MB-23832		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 23832		RunNo: 32255					
Prep Date:	2/19/2016		Analysis Date: 2/19/2016		SeqNo: 986193		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	MB-23846		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987802		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.3	66.2	112			

Sample ID	LCS-23846		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987805		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	79.6	122			
Surr: BFB	990		1000		99.3	66.2	112			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	MB-23846		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987873		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID	LCS-23846		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987880		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	mb-23666		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	23666		RunNo:	32086			
Prep Date:	2/10/2016		Analysis Date:	2/11/2016		SeqNo:	980986		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	0.43		0.5000		86.8	70	130			
Surr: 4-Bromofluorobenzene	0.56		0.5000		112	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.6	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID	lcs-23666		SampType:	LCS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	LCSS		Batch ID:	23666		RunNo:	32086			
Prep Date:	2/10/2016		Analysis Date:	2/11/2016		SeqNo:	980987		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	96.1	70	130			
Chlorobenzene	1.0	0.050	1.000	0	103	70	130			
1,1-Dichloroethene	0.80	0.050	1.000	0	80.1	70	130			
Trichloroethene (TCE)	0.94	0.050	1.000	0	93.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		89.3	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		109	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.3	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID	1602354-001ams		SampType:	MS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	Tank 714 FCC Feed		Batch ID:	23666		RunNo:	32086			
Prep Date:	2/10/2016		Analysis Date:	2/11/2016		SeqNo:	980989		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.50	1.000	0.2086	91.9	70	130			
Chlorobenzene	0.97	0.50	1.000	0	97.0	70	130			
1,1-Dichloroethene	0.83	0.50	1.000	0	83.0	72.6	149			
Trichloroethene (TCE)	0.94	0.50	1.000	0	94.4	62.4	139			
Surr: 1,2-Dichloroethane-d4	4.8		5.000		95.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	1602354-001ams	SampType:	MS	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	Tank 714 FCC Feed	Batch ID:	23666	RunNo:	32086					
Prep Date:	2/10/2016	Analysis Date:	2/11/2016	SeqNo:	980989	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	5.0		5.000		101	70	130			
Surr: Dibromofluoromethane	5.1		5.000		101	70	130			
Surr: Toluene-d8	5.1		5.000		101	70	130			

Sample ID	1602354-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	Tank 714 FCC Feed	Batch ID:	23666	RunNo:	32086					
Prep Date:	2/10/2016	Analysis Date:	2/11/2016	SeqNo:	980990	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.50	1.000	0.2086	98.7	70	130	5.83	20	
Chlorobenzene	0.96	0.50	1.000	0	96.3	70	130	0.776	20	
1,1-Dichloroethene	0.86	0.50	1.000	0	86.5	72.6	149	4.14	20	
Trichloroethene (TCE)	1.0	0.50	1.000	0	100	62.4	139	6.15	20	
Surr: 1,2-Dichloroethane-d4	4.8		5.000		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	5.5		5.000		110	70	130	0	0	
Surr: Dibromofluoromethane	5.0		5.000		100	70	130	0	0	
Surr: Toluene-d8	5.1		5.000		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	mb-23698		SampType:	MBLK		TestCode:	Volatiles by 8260B/1311			
Client ID:	PBS		Batch ID:	23698		RunNo:	32125			
Prep Date:	2/11/2016		Analysis Date:	2/12/2016		SeqNo:	982302		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	200								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		94.0	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.2000		106	70	130			
Surr: Dibromofluoromethane	0.20		0.2000		98.8	70	130			
Surr: Toluene-d8	0.20		0.2000		99.9	70	130			

Sample ID	lcs-23698		SampType:	LCS		TestCode:	Volatiles by 8260B/1311			
Client ID:	LCSS		Batch ID:	23698		RunNo:	32125			
Prep Date:	2/11/2016		Analysis Date:	2/12/2016		SeqNo:	982303		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.41	0.30	0.4000	0	104	70	130			
Chlorobenzene	0.42	0.30	0.4000	0	104	70	130			
1,1-Dichloroethene	0.40	0.30	0.4000	0	98.8	63.8	148			
Trichloroethene (TCE)	0.40	0.30	0.4000	0	99.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.2000		105	70	130			
Surr: Dibromofluoromethane	0.19		0.2000		96.9	70	130			
Surr: Toluene-d8	0.19		0.2000		93.3	70	130			

Sample ID	1602354-002ams		SampType:	MS		TestCode:	Volatiles by 8260B/1311			
Client ID:	Tank 714 FCC Prod		Batch ID:	23698		RunNo:	32125			
Prep Date:	2/11/2016		Analysis Date:	2/12/2016		SeqNo:	982305		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.45	0.30	0.3998	0	112	70	130			
Chlorobenzene	0.44	0.30	0.3998	0	110	70	130			
1,1-Dichloroethene	0.41	0.30	0.3998	0	101	89	129			
Trichloroethene (TCE)	0.42	0.30	0.3998	0	105	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	1602354-002ams	SampType:	MS	TestCode:	Volatiles by 8260B/1311					
Client ID:	Tank 714 FCC Prod	Batch ID:	23698	RunNo:	32125					
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982305	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.19		0.1999		93.8	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.1999		106	70	130			
Surr: Dibromofluoromethane	0.19		0.1999		97.0	70	130			
Surr: Toluene-d8	0.20		0.1999		97.8	70	130			

Sample ID	1602354-002amsd	SampType:	MSD	TestCode:	Volatiles by 8260B/1311					
Client ID:	Tank 714 FCC Prod	Batch ID:	23698	RunNo:	32125					
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982306	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.43	0.30	0.3998	0	107	70	130	4.66	20	
Chlorobenzene	0.43	0.30	0.3998	0	109	70	130	1.64	20	
1,1-Dichloroethene	0.40	0.30	0.3998	0	100	89	129	1.23	20	
Trichloroethene (TCE)	0.41	0.30	0.3998	0	102	70	130	2.52	20	
Surr: 1,2-Dichloroethane-d4	0.18		0.1999		91.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.21		0.1999		105	70	130	0	0	
Surr: Dibromofluoromethane	0.19		0.1999		95.3	70	130	0	0	
Surr: Toluene-d8	0.20		0.1999		101	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#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	mb-23755		SampType: MBLK		TestCode: EPA Method 8270C TCLP					
Client ID:	PBS		Batch ID: 23755		RunNo: 32177					
Prep Date:	2/16/2016		Analysis Date: 2/16/2016		SeqNo: 983657		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.20		0.2000		98.1	19	121			
Surr: Phenol-d5	0.19		0.2000		95.9	31.8	117			
Surr: 2,4,6-Tribromophenol	0.20		0.2000		99.2	31.3	139			
Surr: Nitrobenzene-d5	0.092		0.1000		92.5	48.2	128			
Surr: 2-Fluorobiphenyl	0.099		0.1000		98.9	58.4	114			
Surr: 4-Terphenyl-d14	0.12		0.1000		116	17.4	141			

Sample ID	lcs-23755		SampType: LCS		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS		Batch ID: 23755		RunNo: 32177					
Prep Date:	2/16/2016		Analysis Date: 2/16/2016		SeqNo: 983658		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.090	0.010	0.1000	0	90.1	37.6	110			
3+4-Methylphenol	0.22	0.010	0.2000	0	110	30.5	149			
2,4-Dinitrotoluene	0.077	0.010	0.1000	0	76.8	24.9	93.7			
Hexachlorobenzene	0.096	0.010	0.1000	0	96.0	40	114			
Hexachlorobutadiene	0.099	0.010	0.1000	0	98.5	37.4	119			
Hexachloroethane	0.087	0.010	0.1000	0	87.4	33.8	105			
Nitrobenzene	0.098	0.010	0.1000	0	98.1	33.4	115			
Pentachlorophenol	0.072	0.010	0.1000	0	72.1	27.9	90.3			
Pyridine	0.083	0.010	0.1000	0	82.9	29.3	105			
2,4,5-Trichlorophenol	0.098	0.010	0.1000	0	98.3	34	118			
2,4,6-Trichlorophenol	0.098	0.010	0.1000	0	98.1	34.1	109			
Cresols, Total	0.31	0.010	0.3000	0	104	30	136			
Surr: 2-Fluorophenol	0.17		0.2000		86.4	19	121			
Surr: Phenol-d5	0.18		0.2000		89.8	31.8	117			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	Ics-23755		SampType:	LCS		TestCode:	EPA Method 8270C TCLP			
Client ID:	LCSS		Batch ID:	23755		RunNo:	32177			
Prep Date:	2/16/2016		Analysis Date:	2/16/2016		SeqNo:	983658		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.21		0.2000		104	31.3	139			
Surr: Nitrobenzene-d5	0.094		0.1000		94.2	48.2	128			
Surr: 2-Fluorobiphenyl	0.088		0.1000		87.7	58.4	114			
Surr: 4-Terphenyl-d14	0.090		0.1000		90.0	17.4	141			

Sample ID	1602354-001ams		SampType:	MS		TestCode:	EPA Method 8270C TCLP			
Client ID:	Tank 714 FCC Feed		Batch ID:	23755		RunNo:	32177			
Prep Date:	2/16/2016		Analysis Date:	2/16/2016		SeqNo:	983661		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.10	0.010	0.1000	0	105	43.1	114			
3+4-Methylphenol	0.25	0.010	0.2000	0	126	37.8	128			
2,4-Dinitrotoluene	0.090	0.010	0.1000	0	90.4	36.5	125			
Hexachlorobenzene	0.11	0.010	0.1000	0	110	41.4	108			S
Hexachlorobutadiene	0.095	0.010	0.1000	0	95.4	30.4	101			
Hexachloroethane	0.091	0.010	0.1000	0	90.9	37.3	115			
Nitrobenzene	0.10	0.010	0.1000	0	102	40.2	132			
Pentachlorophenol	0.082	0.010	0.1000	0	81.6	8.72	103			
Pyridine	0.086	0.010	0.1000	0	86.3	9.36	106			
2,4,5-Trichlorophenol	0.12	0.010	0.1000	0	116	16.5	123			
2,4,6-Trichlorophenol	0.11	0.010	0.1000	0	112	11.3	117			
Cresols, Total	0.36	0.010	0.3000	0	119	23.2	151			
Surr: 2-Fluorophenol	0.18		0.2000		87.6	19	121			
Surr: Phenol-d5	0.16		0.2000		79.1	31.8	117			
Surr: 2,4,6-Tribromophenol	0.24		0.2000		118	31.3	139			
Surr: Nitrobenzene-d5	0.11		0.1000		105	48.2	128			
Surr: 2-Fluorobiphenyl	0.10		0.1000		104	58.4	114			
Surr: 4-Terphenyl-d14	0.12		0.1000		123	17.4	141			

Sample ID	1602354-001amsd		SampType:	MSD		TestCode:	EPA Method 8270C TCLP			
Client ID:	Tank 714 FCC Feed		Batch ID:	23755		RunNo:	32177			
Prep Date:	2/16/2016		Analysis Date:	2/16/2016		SeqNo:	983662		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.079	0.010	0.1000	0	79.0	43.1	114	28.2	28.4	
3+4-Methylphenol	0.18	0.010	0.2000	0	88.0	37.8	128	35.5	29.4	R
2,4-Dinitrotoluene	0.076	0.010	0.1000	0	76.1	36.5	125	17.2	24.7	
Hexachlorobenzene	0.092	0.010	0.1000	0	91.9	41.4	108	17.7	20	
Hexachlorobutadiene	0.079	0.010	0.1000	0	78.8	30.4	101	19.2	29	
Hexachloroethane	0.073	0.010	0.1000	0	72.8	37.3	115	22.1	25.2	

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#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	1602354-001amsd	SampType: MSD			TestCode: EPA Method 8270C TCLP					
Client ID:	Tank 714 FCC Feed	Batch ID: 23755			RunNo: 32177					
Prep Date:	2/16/2016	Analysis Date: 2/16/2016			SeqNo: 983662		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	0.082	0.010	0.1000	0	81.8	40.2	132	21.8	26.9	
Pentachlorophenol	ND	0.010	0.1000	0	0	8.72	103	200	59.2	RS
Pyridine	0.063	0.010	0.1000	0	63.2	9.36	106	30.9	48	
2,4,5-Trichlorophenol	0.019	0.010	0.1000	0	18.8	16.5	123	144	70.8	R
2,4,6-Trichlorophenol	ND	0.010	0.1000	0	0	11.3	117	200	78	RS
Cresols, Total	0.26	0.010	0.3000	0	85.0	23.2	151	33.3	30.8	R
Surr: 2-Fluorophenol	0.021		0.2000		10.7	19	121	0	0	S
Surr: Phenol-d5	0.080		0.2000		40.0	31.8	117	0	0	
Surr: 2,4,6-Tribromophenol	0.032		0.2000		16.1	31.3	139	0	0	S
Surr: Nitrobenzene-d5	0.086		0.1000		85.7	48.2	128	0	0	
Surr: 2-Fluorobiphenyl	0.088		0.1000		88.1	58.4	114	0	0	
Surr: 4-Terphenyl-d14	0.10		0.1000		100	17.4	141	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	MB-23694		SampType: MBLK		TestCode: MERCURY, TCLP					
Client ID:	PBW		Batch ID: 23694		RunNo: 32124					
Prep Date:	2/11/2016		Analysis Date: 2/12/2016		SeqNo: 982123		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.020								

Sample ID	LCS-23694			SampType:	LCS		TestCode:	MERCURY, TCLP			
Client ID:	LCSW			Batch ID:	23694		RunNo:	32124			
Prep Date:	2/11/2016			Analysis Date:	2/12/2016		SeqNo:	982124		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	105	80	120				

Sample ID	1602354-001AMS		SampType: ms		TestCode: MERCURY, TCLP					
Client ID:	Tank 714 FCC Feed		Batch ID: 23694		RunNo: 32124					
Prep Date:	2/11/2016		Analysis Date: 2/12/2016		SeqNo: 982126		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	106	75	125			

Sample ID	1602354-001AMSD			SampType:	msd		TestCode:	MERCURY, TCLP			
Client ID:	Tank 714 FCC Feed			Batch ID:	23694		RunNo:	32124			
Prep Date:	2/11/2016		Analysis Date:	2/12/2016		SeqNo:	982127		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	103	75	125	0	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

23-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	MB-23696	SampType: MBLK			TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW	Batch ID: 23696			RunNo: 32097					
Prep Date:	2/11/2016	Analysis Date: 2/12/2016			SeqNo: 981255		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-23696	SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals						
Client ID:	LCSW	Batch ID: 23696		RunNo: 32097						
Prep Date:	2/11/2016	Analysis Date: 2/12/2016		SeqNo: 981256		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	110	80	120			
Barium	ND	100	0.5000	0	98.7	80	120			
Cadmium	ND	1.0	0.5000	0	103	80	120			
Chromium	ND	5.0	0.5000	0	99.1	80	120			
Lead	ND	5.0	0.5000	0	101	80	120			
Selenium	ND	1.0	0.5000	0	112	80	120			
Silver	ND	5.0	0.1000	0	106	80	120			

Qualifiers:

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



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: 1602354

RcptNo: 1

Received by/date: AL 02/09/16

Logged By: Anne Thorne 2/9/2016 3:22:00 PM

Anne Thorne

Completed By: Anne Thorne 2/10/2016

Anne Thorne

Reviewed By: JD 02/10/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Yes			



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

March 01, 2016

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

RE: FCC TK 714 Overflow

OrderNo.: 1602734

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/18/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 1-3

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 11:50:00 AM

Lab ID: 1602734-001

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH	
Diesel Range Organics (DRO)	20000	360	1000		mg/Kg	100	2/19/2016 7:24:15 PM	23832
Motor Oil Range Organics (MRO)	20000	5000	5000		mg/Kg	100	2/19/2016 7:24:15 PM	23832
Surr: DNOP	0	0	70-130	S	%Rec	100	2/19/2016 7:24:15 PM	23832
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	150	10	50		mg/Kg	10	2/19/2016 8:30:52 PM	23808
Surr: BFB	140	0	66.2-112	S	%Rec	10	2/19/2016 8:30:52 PM	23808
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.34	0.057	0.25		mg/Kg	10	2/19/2016 8:30:52 PM	23808
Toluene	3.7	0.051	0.50		mg/Kg	10	2/19/2016 8:30:52 PM	23808
Ethylbenzene	2.3	0.049	0.50		mg/Kg	10	2/19/2016 8:30:52 PM	23808
Xylenes, Total	12	0.14	1.0		mg/Kg	10	2/19/2016 8:30:52 PM	23808
Surr: 4-Bromofluorobenzene	118	0	80-120		%Rec	10	2/19/2016 8:30:52 PM	23808
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	7.0	50	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
1-Methylnaphthalene	ND	7.4	50	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
2-Methylnaphthalene	7.9	7.0	50	JD	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Acenaphthylene	ND	6.7	50	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Acenaphthene	ND	6.2	50	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Fluorene	1.6	0.66	6.0	JD	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Phenanthrene	5.3	0.32	3.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Anthracene	ND	0.48	3.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Fluoranthene	0.86	0.66	4.0	JD	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Pyrene	ND	0.68	5.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Benz(a)anthracene	ND	0.10	2.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Chrysene	4.4	0.28	2.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Benzo(b)fluoranthene	0.15	0.14	2.0	JD	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Benzo(k)fluoranthene	ND	0.080	2.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Benzo(a)pyrene	ND	0.080	2.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Dibenz(a,h)anthracene	0.15	0.10	2.0	JD	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Benzo(g,h,i)perylene	ND	0.12	2.0	D	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Indeno(1,2,3-cd)pyrene	0.30	0.16	2.0	JD	mg/Kg	20	2/29/2016 7:15:57 AM	23961
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	20	2/29/2016 7:15:57 AM	23961
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00075	0.020		mg/L	1	2/23/2016 12:17:40 PM	23856
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Arsenic	ND	0.011	5.0		mg/L	1	2/22/2016 8:36:16 AM	23828
Barium	1.4	0.00060	100	J	mg/L	1	2/22/2016 8:36:16 AM	23828

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 1-3

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 11:50:00 AM

Lab ID: 1602734-001

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Cadmium	ND	0.00090	1.0		mg/L	1	2/22/2016 8:36:16 AM	23828
Chromium	ND	0.0014	5.0		mg/L	1	2/22/2016 8:36:16 AM	23828
Lead	ND	0.0013	5.0		mg/L	1	2/22/2016 8:36:16 AM	23828
Selenium	ND	0.019	1.0		mg/L	1	2/22/2016 8:36:16 AM	23828
Silver	ND	0.0013	5.0		mg/L	1	2/22/2016 8:36:16 AM	23828
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	2/23/2016 11:28:02 AM	23861
3+4-Methylphenol	ND	0.14	200		mg/L	1	2/23/2016 11:28:02 AM	23861
Phenol	ND	200	200		mg/L	1	2/23/2016 11:28:02 AM	23861
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	2/23/2016 11:28:02 AM	23861
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	2/23/2016 11:28:02 AM	23861
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	2/23/2016 11:28:02 AM	23861
Hexachloroethane	ND	0.038	3.0		mg/L	1	2/23/2016 11:28:02 AM	23861
Nitrobenzene	ND	0.039	2.0		mg/L	1	2/23/2016 11:28:02 AM	23861
Pentachlorophenol	ND	0.031	100		mg/L	1	2/23/2016 11:28:02 AM	23861
Pyridine	ND	0.032	5.0		mg/L	1	2/23/2016 11:28:02 AM	23861
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	2/23/2016 11:28:02 AM	23861
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	2/23/2016 11:28:02 AM	23861
Cresols, Total	ND	0.17	200		mg/L	1	2/23/2016 11:28:02 AM	23861
Surr: 2-Fluorophenol	104	0	19-121		%Rec	1	2/23/2016 11:28:02 AM	23861
Surr: Phenol-d5	91.3	0	31.8-117		%Rec	1	2/23/2016 11:28:02 AM	23861
Surr: 2,4,6-Tribromophenol	126	0	31.3-139		%Rec	1	2/23/2016 11:28:02 AM	23861
Surr: Nitrobenzene-d5	119	0	48.2-128		%Rec	1	2/23/2016 11:28:02 AM	23861
Surr: 2-Fluorobiphenyl	115	0	58.4-114	S	%Rec	1	2/23/2016 11:28:02 AM	23861
Surr: 4-Terphenyl-d14	113	0	17.4-141		%Rec	1	2/23/2016 11:28:02 AM	23861
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	0.30	0.20	0.50	J	ppm	10	2/19/2016 1:28:45 PM	23808
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	2/19/2016 1:28:45 PM	23808
2-Butanone	1.2	0.29	200	J	ppm	10	2/19/2016 1:28:45 PM	23808
Carbon tetrachloride	ND	0.033	0.50		ppm	10	2/19/2016 1:28:45 PM	23808
Chlorobenzene	ND	0.041	100		ppm	10	2/19/2016 1:28:45 PM	23808
Chloroform	ND	0.038	6.0		ppm	10	2/19/2016 1:28:45 PM	23808
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	2/19/2016 1:28:45 PM	23808
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	2/19/2016 1:28:45 PM	23808
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	2/19/2016 1:28:45 PM	23808
Trichloroethene (TCE)	ND	0.053	0.50		ppm	10	2/19/2016 1:28:45 PM	23808
Vinyl chloride	ND	0.041	0.20		ppm	10	2/19/2016 1:28:45 PM	23808
Surr: 1,2-Dichloroethane-d4	96.6		70-130		%Rec	10	2/19/2016 1:28:45 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1602734**

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 1-3

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 11:50:00 AM

Lab ID: 1602734-001

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	117		70-130		%Rec	10	2/19/2016 1:28:45 PM	23808
Surr: Dibromofluoromethane	94.0		70-130		%Rec	10	2/19/2016 1:28:45 PM	23808
Surr: Toluene-d8	107		70-130		%Rec	10	2/19/2016 1:28:45 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 4-6

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 11:56:00 AM

Lab ID: 1602734-002

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH	
Diesel Range Organics (DRO)	47000	360	1000		mg/Kg	100	2/19/2016 8:07:35 PM	23832
Motor Oil Range Organics (MRO)	55000	5000	5000		mg/Kg	100	2/19/2016 8:07:35 PM	23832
Surr: DNOP	0	0	70-130	S	%Rec	100	2/19/2016 8:07:35 PM	23832
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	150	10	50		mg/Kg	10	2/19/2016 10:05:07 PM	23808
Surr: BFB	147	0	66.2-112	S	%Rec	10	2/19/2016 10:05:07 PM	23808
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.30	0.057	0.25		mg/Kg	10	2/19/2016 10:05:07 PM	23808
Toluene	3.6	0.051	0.50		mg/Kg	10	2/19/2016 10:05:07 PM	23808
Ethylbenzene	2.3	0.049	0.50		mg/Kg	10	2/19/2016 10:05:07 PM	23808
Xylenes, Total	12	0.14	1.0		mg/Kg	10	2/19/2016 10:05:07 PM	23808
Surr: 4-Bromofluorobenzene	125	0	80-120	S	%Rec	10	2/19/2016 10:05:07 PM	23808
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	17	130	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
1-Methylnaphthalene	29	19	130	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
2-Methylnaphthalene	44	18	130	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Acenaphthylene	ND	17	130	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Acenaphthene	ND	15	130	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Fluorene	7.6	1.7	15	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Phenanthrene	23	0.80	7.5	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Anthracene	ND	1.2	7.5	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Fluoranthene	6.5	1.7	10	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Pyrene	2.8	1.7	13	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Benz(a)anthracene	2.0	0.25	5.0	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Chrysene	18	0.70	5.0	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Benzo(b)fluoranthene	0.75	0.35	5.0	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Benzo(k)fluoranthene	ND	0.20	5.0	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Benzo(a)pyrene	ND	0.20	5.0	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Dibenz(a,h)anthracene	0.88	0.25	5.0	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Benzo(g,h,i)perylene	ND	0.30	5.0	D	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Indeno(1,2,3-cd)pyrene	1.6	0.40	5.0	JD	mg/Kg	50	2/29/2016 9:37:53 AM	23961
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	50	2/29/2016 9:37:53 AM	23961
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00075	0.020		mg/L	1	2/23/2016 12:23:24 PM	23856
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Arsenic	ND	0.011	5.0		mg/L	1	2/22/2016 8:37:31 AM	23828
Barium	1.3	0.00060	100	J	mg/L	1	2/22/2016 8:37:31 AM	23828

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 4-6

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 11:56:00 AM

Lab ID: 1602734-002

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Cadmium	ND	0.00090	1.0		mg/L	1	2/22/2016 8:37:31 AM	23828
Chromium	ND	0.0014	5.0		mg/L	1	2/22/2016 8:37:31 AM	23828
Lead	0.0019	0.0013	5.0	J	mg/L	1	2/22/2016 8:37:31 AM	23828
Selenium	ND	0.019	1.0		mg/L	1	2/22/2016 8:37:31 AM	23828
Silver	ND	0.0013	5.0		mg/L	1	2/22/2016 8:37:31 AM	23828
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	2/23/2016 11:57:46 AM	23861
3+4-Methylphenol	ND	0.14	200		mg/L	1	2/23/2016 11:57:46 AM	23861
Phenol	ND	200	200		mg/L	1	2/23/2016 11:57:46 AM	23861
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	2/23/2016 11:57:46 AM	23861
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	2/23/2016 11:57:46 AM	23861
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	2/23/2016 11:57:46 AM	23861
Hexachloroethane	ND	0.038	3.0		mg/L	1	2/23/2016 11:57:46 AM	23861
Nitrobenzene	ND	0.039	2.0		mg/L	1	2/23/2016 11:57:46 AM	23861
Pentachlorophenol	ND	0.031	100		mg/L	1	2/23/2016 11:57:46 AM	23861
Pyridine	ND	0.032	5.0		mg/L	1	2/23/2016 11:57:46 AM	23861
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	2/23/2016 11:57:46 AM	23861
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	2/23/2016 11:57:46 AM	23861
Cresols, Total	ND	0.17	200		mg/L	1	2/23/2016 11:57:46 AM	23861
Surr: 2-Fluorophenol	104	0	19-121		%Rec	1	2/23/2016 11:57:46 AM	23861
Surr: Phenol-d5	94.7	0	31.8-117		%Rec	1	2/23/2016 11:57:46 AM	23861
Surr: 2,4,6-Tribromophenol	109	0	31.3-139		%Rec	1	2/23/2016 11:57:46 AM	23861
Surr: Nitrobenzene-d5	118	0	48.2-128		%Rec	1	2/23/2016 11:57:46 AM	23861
Surr: 2-Fluorobiphenyl	107	0	58.4-114		%Rec	1	2/23/2016 11:57:46 AM	23861
Surr: 4-Terphenyl-d14	103	0	17.4-141		%Rec	1	2/23/2016 11:57:46 AM	23861
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	0.23	0.20	0.50	J	ppm	10	2/19/2016 1:56:59 PM	23808
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	2/19/2016 1:56:59 PM	23808
2-Butanone	1.2	0.29	200	J	ppm	10	2/19/2016 1:56:59 PM	23808
Carbon tetrachloride	ND	0.033	0.50		ppm	10	2/19/2016 1:56:59 PM	23808
Chlorobenzene	ND	0.041	100		ppm	10	2/19/2016 1:56:59 PM	23808
Chloroform	ND	0.038	6.0		ppm	10	2/19/2016 1:56:59 PM	23808
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	2/19/2016 1:56:59 PM	23808
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	2/19/2016 1:56:59 PM	23808
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	2/19/2016 1:56:59 PM	23808
Trichloroethene (TCE)	ND	0.053	0.50		ppm	10	2/19/2016 1:56:59 PM	23808
Vinyl chloride	ND	0.041	0.20		ppm	10	2/19/2016 1:56:59 PM	23808
Surr: 1,2-Dichloroethane-d4	95.5		70-130		%Rec	10	2/19/2016 1:56:59 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1602734**

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 4-6

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 11:56:00 AM

Lab ID: 1602734-002

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	112		70-130		%Rec	10	2/19/2016 1:56:59 PM	23808
Surr: Dibromofluoromethane	98.1		70-130		%Rec	10	2/19/2016 1:56:59 PM	23808
Surr: Toluene-d8	108		70-130		%Rec	10	2/19/2016 1:56:59 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 7-9

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 12:03:00 PM

Lab ID: 1602734-003

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH	
Diesel Range Organics (DRO)	37000	360	1000		mg/Kg	100	2/19/2016 8:50:45 PM	23832
Motor Oil Range Organics (MRO)	45000	5100	5100		mg/Kg	100	2/19/2016 8:50:45 PM	23832
Surr: DNOP	0	0	70-130	S	%Rec	100	2/19/2016 8:50:45 PM	23832
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	260	9.9	48		mg/Kg	10	2/22/2016 11:15:47 AM	23846
Surr: BFB	181	0	66.2-112	S	%Rec	10	2/22/2016 11:15:47 AM	23846
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.67	0.055	0.24		mg/Kg	10	2/22/2016 11:15:47 AM	23846
Toluene	7.3	0.049	0.48		mg/Kg	10	2/22/2016 11:15:47 AM	23846
Ethylbenzene	4.4	0.047	0.48		mg/Kg	10	2/22/2016 11:15:47 AM	23846
Xylenes, Total	22	0.14	0.97		mg/Kg	10	2/22/2016 11:15:47 AM	23846
Surr: 4-Bromofluorobenzene	137	0	80-120	S	%Rec	10	2/22/2016 11:15:47 AM	23846
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	17	120	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
1-Methylnaphthalene	27	18	120	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
2-Methylnaphthalene	43	17	120	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Acenaphthylene	ND	17	120	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Acenaphthene	ND	15	120	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Fluorene	7.4	1.6	15	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Phenanthrene	23	0.79	7.4	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Anthracene	ND	1.2	7.4	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Fluoranthene	6.3	1.6	9.9	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Pyrene	2.7	1.7	12	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Benz(a)anthracene	ND	0.25	5.0	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Chrysene	17	0.69	5.0	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Benzo(b)fluoranthene	4.8	0.35	5.0	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Benzo(k)fluoranthene	1.4	0.20	5.0	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Benzo(a)pyrene	0.87	0.20	5.0	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Dibenz(a,h)anthracene	0.62	0.25	5.0	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Benzo(g,h,i)perylene	ND	0.30	5.0	D	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Indeno(1,2,3-cd)pyrene	1.2	0.40	5.0	JD	mg/Kg	50	2/29/2016 11:02:05 AM	23961
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	50	2/29/2016 11:02:05 AM	23961
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00075	0.020		mg/L	1	2/23/2016 12:25:20 PM	23856
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Arsenic	ND	0.011	5.0		mg/L	1	2/22/2016 8:38:46 AM	23828
Barium	1.2	0.00060	100	J	mg/L	1	2/22/2016 8:38:46 AM	23828

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 7-9

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 12:03:00 PM

Lab ID: 1602734-003

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Cadmium	ND	0.00090	1.0		mg/L	1	2/22/2016 8:38:46 AM	23828
Chromium	ND	0.0014	5.0		mg/L	1	2/22/2016 8:38:46 AM	23828
Lead	ND	0.0013	5.0		mg/L	1	2/22/2016 8:38:46 AM	23828
Selenium	ND	0.019	1.0		mg/L	1	2/22/2016 8:38:46 AM	23828
Silver	ND	0.0013	5.0		mg/L	1	2/22/2016 8:38:46 AM	23828
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	2/23/2016 12:27:47 PM	23861
3+4-Methylphenol	ND	0.14	200		mg/L	1	2/23/2016 12:27:47 PM	23861
Phenol	ND	200	200		mg/L	1	2/23/2016 12:27:47 PM	23861
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	2/23/2016 12:27:47 PM	23861
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	2/23/2016 12:27:47 PM	23861
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	2/23/2016 12:27:47 PM	23861
Hexachloroethane	ND	0.038	3.0		mg/L	1	2/23/2016 12:27:47 PM	23861
Nitrobenzene	ND	0.039	2.0		mg/L	1	2/23/2016 12:27:47 PM	23861
Pentachlorophenol	ND	0.031	100		mg/L	1	2/23/2016 12:27:47 PM	23861
Pyridine	ND	0.032	5.0		mg/L	1	2/23/2016 12:27:47 PM	23861
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	2/23/2016 12:27:47 PM	23861
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	2/23/2016 12:27:47 PM	23861
Cresols, Total	ND	0.17	200		mg/L	1	2/23/2016 12:27:47 PM	23861
Surr: 2-Fluorophenol	88.9	0	19-121		%Rec	1	2/23/2016 12:27:47 PM	23861
Surr: Phenol-d5	82.6	0	31.8-117		%Rec	1	2/23/2016 12:27:47 PM	23861
Surr: 2,4,6-Tribromophenol	104	0	31.3-139		%Rec	1	2/23/2016 12:27:47 PM	23861
Surr: Nitrobenzene-d5	98.9	0	48.2-128		%Rec	1	2/23/2016 12:27:47 PM	23861
Surr: 2-Fluorobiphenyl	106	0	58.4-114		%Rec	1	2/23/2016 12:27:47 PM	23861
Surr: 4-Terphenyl-d14	106	0	17.4-141		%Rec	1	2/23/2016 12:27:47 PM	23861
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	0.35	0.20	0.50	J	ppm	10	2/19/2016 2:25:14 PM	23808
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	2/19/2016 2:25:14 PM	23808
2-Butanone	1.7	0.29	200	J	ppm	10	2/19/2016 2:25:14 PM	23808
Carbon tetrachloride	ND	0.033	0.50		ppm	10	2/19/2016 2:25:14 PM	23808
Chlorobenzene	ND	0.041	100		ppm	10	2/19/2016 2:25:14 PM	23808
Chloroform	ND	0.038	6.0		ppm	10	2/19/2016 2:25:14 PM	23808
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	2/19/2016 2:25:14 PM	23808
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	2/19/2016 2:25:14 PM	23808
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	2/19/2016 2:25:14 PM	23808
Trichloroethene (TCE)	ND	0.054	0.50		ppm	10	2/19/2016 2:25:14 PM	23808
Vinyl chloride	ND	0.041	0.20		ppm	10	2/19/2016 2:25:14 PM	23808
Surr: 1,2-Dichloroethane-d4	97.0		70-130		%Rec	10	2/19/2016 2:25:14 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1602734**

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 7-9

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 12:03:00 PM

Lab ID: 1602734-003

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	116		70-130		%Rec	10	2/19/2016 2:25:14 PM	23808
Surr: Dibromofluoromethane	95.1		70-130		%Rec	10	2/19/2016 2:25:14 PM	23808
Surr: Toluene-d8	104		70-130		%Rec	10	2/19/2016 2:25:14 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 10-12

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 12:08:00 PM

Lab ID: 1602734-004

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH	
Diesel Range Organics (DRO)	48000	350	970		mg/Kg	100	2/19/2016 9:33:58 PM	23832
Motor Oil Range Organics (MRO)	57000	4800	4800		mg/Kg	100	2/19/2016 9:33:58 PM	23832
Surr: DNOP	0	0	70-130	S	%Rec	100	2/19/2016 9:33:58 PM	23832
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	220	10	49		mg/Kg	10	2/22/2016 11:39:14 AM	23846
Surr: BFB	165	0	66.2-112	S	%Rec	10	2/22/2016 11:39:14 AM	23846
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.46	0.056	0.24		mg/Kg	10	2/22/2016 11:39:14 AM	23846
Toluene	5.8	0.050	0.49		mg/Kg	10	2/22/2016 11:39:14 AM	23846
Ethylbenzene	3.6	0.048	0.49		mg/Kg	10	2/22/2016 11:39:14 AM	23846
Xylenes, Total	19	0.14	0.98		mg/Kg	10	2/22/2016 11:39:14 AM	23846
Surr: 4-Bromofluorobenzene	131	0	80-120	S	%Rec	10	2/22/2016 11:39:14 AM	23846
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	17	120	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
1-Methylnaphthalene	ND	18	120	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
2-Methylnaphthalene	ND	17	120	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Acenaphthylene	ND	17	120	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Acenaphthene	ND	15	120	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Fluorene	2.6	1.6	15	JD	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Phenanthrene	9.0	0.80	7.5	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Anthracene	ND	1.2	7.5	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Fluoranthene	ND	1.6	10	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Pyrene	ND	1.7	12	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Benz(a)anthracene	1.2	0.25	5.0	JD	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Chrysene	6.5	0.70	5.0	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Benzo(b)fluoranthene	1.6	0.35	5.0	JD	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Benzo(k)fluoranthene	0.37	0.20	5.0	JD	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Benzo(a)pyrene	0.25	0.20	5.0	JD	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Dibenz(a,h)anthracene	ND	0.25	5.0	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Benzo(g,h,i)perylene	ND	0.30	5.0	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Indeno(1,2,3-cd)pyrene	ND	0.40	5.0	D	mg/Kg	50	2/29/2016 11:35:21 AM	23961
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	50	2/29/2016 11:35:21 AM	23961
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00075	0.020		mg/L	1	2/23/2016 12:27:16 PM	23856
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Arsenic	ND	0.011	5.0		mg/L	1	2/22/2016 8:40:00 AM	23828
Barium	1.3	0.00060	100	J	mg/L	1	2/22/2016 8:40:00 AM	23828

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1602734

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 10-12

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 12:08:00 PM

Lab ID: 1602734-004

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: ELS	
Cadmium	ND	0.00090	1.0		mg/L	1	2/22/2016 8:40:00 AM	23828
Chromium	ND	0.0014	5.0		mg/L	1	2/22/2016 8:40:00 AM	23828
Lead	0.0019	0.0013	5.0	J	mg/L	1	2/22/2016 8:40:00 AM	23828
Selenium	ND	0.019	1.0		mg/L	1	2/22/2016 8:40:00 AM	23828
Silver	ND	0.0013	5.0		mg/L	1	2/22/2016 8:40:00 AM	23828
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	2/23/2016 12:57:32 PM	23861
3+4-Methylphenol	ND	0.14	200		mg/L	1	2/23/2016 12:57:32 PM	23861
Phenol	ND	200	200		mg/L	1	2/23/2016 12:57:32 PM	23861
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	2/23/2016 12:57:32 PM	23861
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	2/23/2016 12:57:32 PM	23861
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	2/23/2016 12:57:32 PM	23861
Hexachloroethane	ND	0.038	3.0		mg/L	1	2/23/2016 12:57:32 PM	23861
Nitrobenzene	ND	0.039	2.0		mg/L	1	2/23/2016 12:57:32 PM	23861
Pentachlorophenol	ND	0.031	100		mg/L	1	2/23/2016 12:57:32 PM	23861
Pyridine	ND	0.032	5.0		mg/L	1	2/23/2016 12:57:32 PM	23861
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	2/23/2016 12:57:32 PM	23861
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	2/23/2016 12:57:32 PM	23861
Cresols, Total	ND	0.17	200		mg/L	1	2/23/2016 12:57:32 PM	23861
Surr: 2-Fluorophenol	43.7	0	19-121		%Rec	1	2/23/2016 12:57:32 PM	23861
Surr: Phenol-d5	54.5	0	31.8-117		%Rec	1	2/23/2016 12:57:32 PM	23861
Surr: 2,4,6-Tribromophenol	58.8	0	31.3-139		%Rec	1	2/23/2016 12:57:32 PM	23861
Surr: Nitrobenzene-d5	74.9	0	48.2-128		%Rec	1	2/23/2016 12:57:32 PM	23861
Surr: 2-Fluorobiphenyl	67.9	0	58.4-114		%Rec	1	2/23/2016 12:57:32 PM	23861
Surr: 4-Terphenyl-d14	83.0	0	17.4-141		%Rec	1	2/23/2016 12:57:32 PM	23861
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	0.28	0.20	0.50	J	ppm	10	2/19/2016 2:53:37 PM	23808
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	2/19/2016 2:53:37 PM	23808
2-Butanone	1.2	0.29	200	J	ppm	10	2/19/2016 2:53:37 PM	23808
Carbon tetrachloride	ND	0.033	0.50		ppm	10	2/19/2016 2:53:37 PM	23808
Chlorobenzene	ND	0.041	100		ppm	10	2/19/2016 2:53:37 PM	23808
Chloroform	ND	0.038	6.0		ppm	10	2/19/2016 2:53:37 PM	23808
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	2/19/2016 2:53:37 PM	23808
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	2/19/2016 2:53:37 PM	23808
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	2/19/2016 2:53:37 PM	23808
Trichloroethene (TCE)	ND	0.054	0.50		ppm	10	2/19/2016 2:53:37 PM	23808
Vinyl chloride	ND	0.041	0.20		ppm	10	2/19/2016 2:53:37 PM	23808
Surr: 1,2-Dichloroethane-d4	96.5		70-130		%Rec	10	2/19/2016 2:53:37 PM	23808

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1602734**

Date Reported: 3/1/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 10-12

Project: FCC TK 714 Overflow

Collection Date: 2/16/2016 12:08:00 PM

Lab ID: 1602734-004

Matrix: SOIL

Received Date: 2/18/2016 8:15:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	115		70-130		%Rec	10	2/19/2016 2:53:37 PM	23808
Surr: Dibromofluoromethane	94.9		70-130		%Rec	10	2/19/2016 2:53:37 PM	23808
Surr: Toluene-d8	107		70-130		%Rec	10	2/19/2016 2:53:37 PM	23808

Refer to the QC Summary report and 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

Anatek Labs, Inc.

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

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

Batch #: 160219016
Project Name: 1602734

Analytical Results Report

Sample Number	160219016-001	Sampling Date	2/16/2016	Date/Time Received	2/19/2016	12:10 PM
Client Sample ID	1602734-001B / FCC 714 1-3	Sampling Time	11:50 AM			
Matrix	Soil	Sample Location				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	24.3	2/23/2016	MER	SW846 CH7	
Ignitability	Negative			2/23/2016	JWC	EPA 1030	
pH	8.56	ph Units		2/23/2016	KMC	EPA 9045	
Reactive sulfide	ND	mg/kg	24.3	2/23/2016	KMC	SW846 CH7	

Sample Number	160219016-002	Sampling Date	2/16/2016	Date/Time Received	2/19/2016	12:10 PM
Client Sample ID	1602734-002B / FCC 714 4-6	Sampling Time	11:56 AM			
Matrix	Soil	Sample Location				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	24.5	2/23/2016	MER	SW846 CH7	
Ignitability	Negative			2/23/2016	JWC	EPA 1030	
pH	8.44	ph Units		2/23/2016	KMC	EPA 9045	
Reactive sulfide	ND	mg/kg	24.5	2/23/2016	KMC	SW846 CH7	

Sample Number	160219016-003	Sampling Date	2/16/2016	Date/Time Received	2/19/2016	12:10 PM
Client Sample ID	1602734-003B / FCC 714 7-9	Sampling Time	12:03 PM			
Matrix	Soil	Sample Location				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	23.9	2/23/2016	MER	SW846 CH7	
Ignitability	Negative			2/23/2016	JWC	EPA 1030	
pH	8.52	ph Units		2/23/2016	KMC	EPA 9045	
Reactive sulfide	ND	mg/kg	23.9	2/23/2016	KMC	SW846 CH7	

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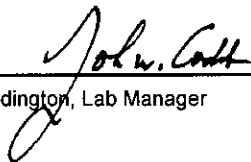
Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 160219016
Project Name: 1602734

Analytical Results Report

Sample Number	160219016-004	Sampling Date	2/16/2016	Date/Time Received	2/19/2016	12:10 PM
Client Sample ID	1602734-004B / FCC 714 10-12	Sampling Time	12:08 PM			
Matrix	Soil	Sample Location				
Comments						
	</					

Authorized Signature


John Coddington, Lab Manager

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

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

Anatek Labs, Inc.

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

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

Batch #: 160219016
Project Name: 1602734

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Reactive sulfide	0.18	mg/kg	0.2	90.0	80-120	2/23/2016	2/23/2016
Cyanide (reactive)	0.533	mg/kg	0.5	106.6	70-130	2/23/2016	2/23/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160219016-004	Reactive sulfide	ND	42.8	mg/kg	47.6	89.9	70-130	2/23/2016	2/23/2016
160219016-001	Cyanide (reactive)	ND	12.4	mg/kg	12.2	101.6	60-140	2/23/2016	2/23/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide (reactive)	12.7	mg/kg	12.2	104.1	2.4	0-25	2/23/2016	2/23/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide (reactive)	ND	mg/Kg	1	2/23/2016	2/23/2016
Reactive sulfide	ND	mg/kg	10	2/23/2016	2/23/2016

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

Comments:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	LCS-23832		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 23832		RunNo: 32255					
Prep Date:	2/19/2016		Analysis Date: 2/19/2016		SeqNo: 986191		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.6	65.8	136			
Surr: DNOP	4.8		5.000		95.1	70	130			

Sample ID	MB-23832	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 23832			RunNo: 32255					
Prep Date:	2/19/2016	Analysis Date: 2/19/2016			SeqNo: 986193		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-23808		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 23808		RunNo: 32264					
Prep Date:	2/18/2016		Analysis Date: 2/19/2016		SeqNo: 986791		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		89.2	66.2	112			

Sample ID	LCS-23808		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 23808		RunNo: 32264					
Prep Date:	2/18/2016		Analysis Date: 2/19/2016		SeqNo: 986792		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	79.6	122			
Surr: BFB	970		1000		96.8	66.2	112			

Sample ID	MB-23846		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987802		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.3	66.2	112			

Sample ID	LCS-23846		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987805		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	79.6	122			
Surr: BFB	990		1000		99.3	66.2	112			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-23808	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	23808		RunNo:	32264				
Prep Date:	2/18/2016	Analysis Date:	2/19/2016		SeqNo:	986804		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	LCS-23808		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 23808		RunNo: 32264					
Prep Date:	2/18/2016		Analysis Date: 2/19/2016		SeqNo: 986805		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	109	80	120			
Toluene	1.1	0.050	1.000	0	115	80	120			
Ethylbenzene	1.1	0.050	1.000	0	111	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	MB-23846		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987873		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID	LCS-23846		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 23846		RunNo: 32301					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987880		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	mb-23808		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	23808		RunNo:	32289			
Prep Date:	2/18/2016		Analysis Date:	2/19/2016		SeqNo:	987151		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	0.040	20								J
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	0.45		0.5000		91.0	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		109	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		91.2	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID	lcs-23808		SampType:	LCS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	LCSS		Batch ID:	23808		RunNo:	32289			
Prep Date:	2/18/2016		Analysis Date:	2/19/2016		SeqNo:	987167		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.050	1.000	0	86.6	70	130			
Chlorobenzene	0.97	0.050	1.000	0	97.0	70	130			
1,1-Dichloroethene	0.91	0.050	1.000	0	90.8	70	130			
Trichloroethene (TCE)	0.84	0.050	1.000	0	84.3	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.2	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.2	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Sample ID	1602734-001ams		SampType:	MS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	FCC 714 1-3		Batch ID:	23808		RunNo:	32289			
Prep Date:	2/18/2016		Analysis Date:	2/19/2016		SeqNo:	987201		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.50	1.000	0.2987	56.8	70	130			S
Chlorobenzene	0.65	0.50	1.000	0	65.3	70	130			S
1,1-Dichloroethene	0.62	0.50	1.000	0	61.6	72.6	149			S
Trichloroethene (TCE)	0.61	0.50	1.000	0	60.8	62.4	139			S
Surr: 1,2-Dichloroethane-d4	4.9		5.000		97.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	1602734-001ams	SampType:	MS	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	FCC 714 1-3	Batch ID:	23808	RunNo:	32289					
Prep Date:	2/18/2016	Analysis Date:	2/19/2016	SeqNo:	987201	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	5.4		5.000		107	70	130			
Surr: Dibromofluoromethane	5.0		5.000		99.4	70	130			
Surr: Toluene-d8	5.4		5.000		108	70	130			

Sample ID	1602734-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	FCC 714 1-3	Batch ID:	23808	RunNo:	32289					
Prep Date:	2/18/2016	Analysis Date:	2/19/2016	SeqNo:	987221	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.50	1.000	0.2987	71.7	70	130	15.9	20	
Chlorobenzene	0.94	0.50	1.000	0	94.2	70	130	36.3	20	R
1,1-Dichloroethene	0.87	0.50	1.000	0	87.2	72.6	149	34.4	20	R
Trichloroethene (TCE)	0.79	0.50	1.000	0	79.3	62.4	139	26.4	20	R
Surr: 1,2-Dichloroethane-d4	4.9		5.000		97.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	5.4		5.000		108	70	130	0	0	
Surr: Dibromofluoromethane	4.8		5.000		96.2	70	130	0	0	
Surr: Toluene-d8	5.4		5.000		109	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	mb-23861		SampType:	MBLK		TestCode:	EPA Method 8270C TCLP			
Client ID:	PBS		Batch ID:	23861		RunNo:	32322			
Prep Date:	2/22/2016		Analysis Date:	2/22/2016		SeqNo:	988062		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.18		0.2000		88.8	19	121			
Surr: Phenol-d5	0.19		0.2000		97.0	31.8	117			
Surr: 2,4,6-Tribromophenol	0.15		0.2000		75.5	31.3	139			
Surr: Nitrobenzene-d5	0.089		0.1000		89.4	48.2	128			
Surr: 2-Fluorobiphenyl	0.089		0.1000		89.3	58.4	114			
Surr: 4-Terphenyl-d14	0.085		0.1000		85.5	17.4	141			

Sample ID	lcs-23861		SampType:	LCS		TestCode:	EPA Method 8270C TCLP			
Client ID:	LCSS		Batch ID:	23861		RunNo:	32322			
Prep Date:	2/22/2016		Analysis Date:	2/22/2016		SeqNo:	988063		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.087	0.010	0.1000	0	86.9	37.6	110			
3+4-Methylphenol	0.21	0.010	0.2000	0	105	30.5	149			
2,4-Dinitrotoluene	0.080	0.010	0.1000	0	80.0	24.9	93.7			
Hexachlorobenzene	0.087	0.010	0.1000	0	87.0	40	114			
Hexachlorobutadiene	0.092	0.010	0.1000	0	91.6	37.4	119			
Hexachloroethane	0.080	0.010	0.1000	0	79.6	33.8	105			
Nitrobenzene	0.084	0.010	0.1000	0	84.4	33.4	115			
Pentachlorophenol	0.059	0.010	0.1000	0	59.2	27.9	90.3			
Pyridine	0.077	0.010	0.1000	0	77.0	29.3	105			
2,4,5-Trichlorophenol	0.093	0.010	0.1000	0	93.4	34	118			
2,4,6-Trichlorophenol	0.087	0.010	0.1000	0	86.7	34.1	109			
Cresols, Total	0.30	0.010	0.3000	0	98.9	30	136			
Surr: 2-Fluorophenol	0.16		0.2000		78.9	19	121			
Surr: Phenol-d5	0.17		0.2000		86.8	31.8	117			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	lcs-23861		SampType: LCS		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS		Batch ID: 23861		RunNo: 32322					
Prep Date:	2/22/2016		Analysis Date: 2/22/2016		SeqNo: 988063		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.17		0.2000		83.0	31.3	139			
Surr: Nitrobenzene-d5	0.093		0.1000		93.2	48.2	128			
Surr: 2-Fluorobiphenyl	0.085		0.1000		84.6	58.4	114			
Surr: 4-Terphenyl-d14	0.082		0.1000		82.1	17.4	141			

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#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-23961		SampType:	MBLK		TestCode:	EPA Method 8310: PAHs			
Client ID:	PBS		Batch ID:	23961		RunNo:	32442			
Prep Date:	2/26/2016		Analysis Date:	2/29/2016		SeqNo:	992131		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	ND	0.015								
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	0.0012	0.010								J
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.25		0.5000		50.2	30.6	128			

Sample ID	LCS-23961		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	23961		RunNo:	32442			
Prep Date:	2/26/2016		Analysis Date:	2/29/2016		SeqNo:	992132		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	2.0	0.25	2.000	0	102	33.7	117			
1-Methylnaphthalene	2.0	0.25	2.000	0	100	32	119			
2-Methylnaphthalene	2.0	0.25	2.000	0	99.5	31.8	118			
Acenaphthylene	1.9	0.25	2.000	0	97.1	36.1	123			
Acenaphthene	2.0	0.25	2.000	0	99.5	31.8	118			
Fluorene	0.18	0.030	0.2000	0	91.9	29	120			
Phenanthrene	0.10	0.015	0.1006	0	103	33	114			
Anthracene	0.099	0.015	0.1006	0	98.4	35.6	110			
Fluoranthene	0.22	0.020	0.2006	0	109	34.8	118			
Pyrene	0.20	0.025	0.2000	0	102	34.9	127			
Benz(a)anthracene	0.022	0.010	0.02000	0	109	35.8	117			
Chrysene	0.11	0.010	0.1006	0	105	34.7	119			
Benzo(b)fluoranthene	0.024	0.010	0.02500	0	94.0	40.9	115			
Benzo(k)fluoranthene	0.013	0.010	0.01250	0	104	36.8	118			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	LCS-23961		SampType: LCS		TestCode: EPA Method 8310: PAHs					
Client ID:	LCSS		Batch ID: 23961		RunNo: 32442					
Prep Date:	2/26/2016		Analysis Date: 2/29/2016		SeqNo: 992132		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.014	0.010	0.01250	0	108	40	115			
Dibenz(a,h)anthracene	0.027	0.010	0.02500	0	108	35.8	119			
Benzo(g,h,i)perylene	0.026	0.010	0.02500	0	106	36.8	123			
Indeno(1,2,3-cd)pyrene	0.054	0.010	0.05002	0	107	35.3	117			
Surr: Benzo(e)pyrene	0.26		0.5000		52.4	30.6	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-23856		SampType: MBLK		TestCode: MERCURY, TCLP					
Client ID:	PBW		Batch ID: 23856		RunNo: 32348					
Prep Date:	2/22/2016		Analysis Date: 2/23/2016		SeqNo: 988715		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.020								

Sample ID	LCS-23856		SampType: LCS		TestCode: MERCURY, TCLP					
Client ID:	LCSW		Batch ID: 23856		RunNo: 32348					
Prep Date:	2/22/2016		Analysis Date: 2/23/2016		SeqNo: 988716		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.020	0.005000	0	98.0	80	120			J

Sample ID	1602734-001AMS		SampType: ms		TestCode: MERCURY, TCLP					
Client ID:	FCC 714 1-3		Batch ID: 23856		RunNo: 32348					
Prep Date:	2/22/2016		Analysis Date: 2/23/2016		SeqNo: 988718		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	99.8	75	125			J

Sample ID	1602734-001AMSD			SampType:	msd		TestCode:	MERCURY, TCLP			
Client ID:	FCC 714 1-3			Batch ID:	23856		RunNo:	32348			
Prep Date:	2/22/2016			Analysis Date:	2/23/2016		SeqNo:	988719		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercurv	0.0048	0.020	0.005000	0	95.8	75	125	3.99	20	J	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602734

01-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-23828		SampType: MBLK		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW		Batch ID: 23828		RunNo: 32290					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987019		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	0.0014	100								J
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-23828		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 23828		RunNo: 32290					
Prep Date:	2/19/2016		Analysis Date: 2/22/2016		SeqNo: 987020		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.56	5.0	0.5000	0	112	80	120			J
Barium	0.51	100	0.5000	0	102	80	120			J
Cadmium	0.53	1.0	0.5000	0	105	80	120			J
Chromium	0.50	5.0	0.5000	0	101	80	120			J
Lead	0.52	5.0	0.5000	0	104	80	120			J
Selenium	0.57	1.0	0.5000	0	114	80	120			J
Silver	0.11	5.0	0.1000	0	105	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



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: 1602734

RcptNo: 1

Received by/date:

JA 02/18/16

Logged By: Ashley Gallegos

2/18/2016 8:15:00 AM

AG

Completed By: Ashley Gallegos

2/18/2016 8:35:27 AM

AG

Reviewed By:

IO 02/18/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



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

March 14, 2016

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

RE: FCC TK 714 Overflow

OrderNo.: 1603068

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/1/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #1

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 10:45:00 AM

Lab ID: 1603068-001

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 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)	42000	340	960		mg/Kg	100	3/3/2016 10:15:51 AM	24026
Motor Oil Range Organics (MRO)	49000	4800	4800		mg/Kg	100	3/3/2016 10:15:51 AM	24026
Surr: DNOP	0	0	70-130	S	%Rec	100	3/3/2016 10:15:51 AM	24026
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	160	5.1	25		mg/Kg	5	3/3/2016 8:14:02 PM	24035
Surr: BFB	224	0	66.2-112	S	%Rec	5	3/3/2016 8:14:02 PM	24035
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.19	0.028	0.10		mg/Kg	5	3/3/2016 8:14:02 PM	24035
Toluene	2.2	0.025	0.25		mg/Kg	5	3/3/2016 8:14:02 PM	24035
Ethylbenzene	1.8	0.024	0.25		mg/Kg	5	3/3/2016 8:14:02 PM	24035
Xylenes, Total	9.5	0.071	0.50		mg/Kg	5	3/3/2016 8:14:02 PM	24035
Surr: 4-Bromofluorobenzene	131	0	80-120	S	%Rec	5	3/3/2016 8:14:02 PM	24035
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	25	180	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
1-Methylnaphthalene	38	26	180	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
2-Methylnaphthalene	56	25	180	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Acenaphthylene	ND	24	180	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Acenaphthene	ND	22	180	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Fluorene	9.7	2.3	21	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Phenanthrene	29	1.1	11	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Anthracene	ND	1.7	11	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Fluoranthene	3.9	2.3	14	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Pyrene	3.5	2.4	18	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Benz(a)anthracene	2.8	0.35	7.0	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Chrysene	23	0.99	7.0	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Benzo(b)fluoranthene	0.88	0.50	7.0	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Benzo(k)fluoranthene	ND	0.28	7.0	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Benzo(a)pyrene	ND	0.28	7.0	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Dibenz(a,h)anthracene	ND	0.35	7.0	D	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Benzo(g,h,i)perylene	0.53	0.42	7.0	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Indeno(1,2,3-cd)pyrene	1.6	0.56	7.0	JD	mg/Kg	20	3/8/2016 4:46:03 PM	24059
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	20	3/8/2016 4:46:03 PM	24059
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00050	0.020		mg/L	1	3/4/2016 5:56:39 AM	24071
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Arsenic	ND	0.011	5.0		mg/L	1	3/9/2016 7:47:17 AM	24070
Barium	1.1	0.00060	100	J	mg/L	1	3/9/2016 7:47:17 AM	24070

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #1

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 10:45:00 AM

Lab ID: 1603068-001

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Cadmium	ND	0.00090	1.0		mg/L	1	3/9/2016 7:47:17 AM	24070
Chromium	0.010	0.0014	5.0	J	mg/L	1	3/9/2016 7:47:17 AM	24070
Lead	0.0079	0.0013	5.0	J	mg/L	1	3/9/2016 7:47:17 AM	24070
Selenium	ND	0.019	1.0		mg/L	1	3/9/2016 7:47:17 AM	24070
Silver	ND	0.0013	5.0		mg/L	1	3/9/2016 7:47:17 AM	24070
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	3/4/2016 6:48:07 PM	24087
3+4-Methylphenol	ND	0.14	200		mg/L	1	3/4/2016 6:48:07 PM	24087
Phenol	ND	200	200		mg/L	1	3/4/2016 6:48:07 PM	24087
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	3/4/2016 6:48:07 PM	24087
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	3/4/2016 6:48:07 PM	24087
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	3/4/2016 6:48:07 PM	24087
Hexachloroethane	ND	0.038	3.0		mg/L	1	3/4/2016 6:48:07 PM	24087
Nitrobenzene	ND	0.039	2.0		mg/L	1	3/4/2016 6:48:07 PM	24087
Pentachlorophenol	ND	0.031	100		mg/L	1	3/4/2016 6:48:07 PM	24087
Pyridine	ND	0.032	5.0		mg/L	1	3/4/2016 6:48:07 PM	24087
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	3/4/2016 6:48:07 PM	24087
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	3/4/2016 6:48:07 PM	24087
Cresols, Total	ND	0.17	200		mg/L	1	3/4/2016 6:48:07 PM	24087
Surr: 2-Fluorophenol	58.5	0	19-121		%Rec	1	3/4/2016 6:48:07 PM	24087
Surr: Phenol-d5	43.1	0	31.8-117		%Rec	1	3/4/2016 6:48:07 PM	24087
Surr: 2,4,6-Tribromophenol	82.1	0	31.3-139		%Rec	1	3/4/2016 6:48:07 PM	24087
Surr: Nitrobenzene-d5	94.0	0	48.2-128		%Rec	1	3/4/2016 6:48:07 PM	24087
Surr: 2-Fluorobiphenyl	97.3	0	58.4-114		%Rec	1	3/4/2016 6:48:07 PM	24087
Surr: 4-Terphenyl-d14	71.0	0	17.4-141		%Rec	1	3/4/2016 6:48:07 PM	24087
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	ND	0.20	0.50		ppm	10	3/3/2016 12:19:43 PM	24035
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	3/3/2016 12:19:43 PM	24035
2-Butanone	1.1	0.29	200	J	ppm	10	3/3/2016 12:19:43 PM	24035
Carbon tetrachloride	ND	0.033	0.50		ppm	10	3/3/2016 12:19:43 PM	24035
Chlorobenzene	ND	0.041	100		ppm	10	3/3/2016 12:19:43 PM	24035
Chloroform	ND	0.038	6.0		ppm	10	3/3/2016 12:19:43 PM	24035
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	3/3/2016 12:19:43 PM	24035
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	3/3/2016 12:19:43 PM	24035
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	3/3/2016 12:19:43 PM	24035
Trichloroethene (TCE)	ND	0.054	0.50		ppm	10	3/3/2016 12:19:43 PM	24035
Vinyl chloride	ND	0.041	0.20		ppm	10	3/3/2016 12:19:43 PM	24035
Surr: 1,2-Dichloroethane-d4	96.7		70-130		%Rec	10	3/3/2016 12:19:43 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #1

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 10:45:00 AM

Lab ID: 1603068-001

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	111		70-130		%Rec	10	3/3/2016 12:19:43 PM	24035
Surr: Dibromofluoromethane	99.8		70-130		%Rec	10	3/3/2016 12:19:43 PM	24035
Surr: Toluene-d8	104		70-130		%Rec	10	3/3/2016 12:19:43 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #2

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 10:55:00 AM

Lab ID: 1603068-002

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 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)	32000	340	940		mg/Kg	100	3/3/2016 10:58:25 AM	24026
Motor Oil Range Organics (MRO)	38000	4700	4700		mg/Kg	100	3/3/2016 10:58:25 AM	24026
Surr: DNOP	0	0	70-130	S	%Rec	100	3/3/2016 10:58:25 AM	24026
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	49	2.1	10		mg/Kg	2	3/3/2016 8:37:42 PM	24035
Surr: BFB	210	0	66.2-112	S	%Rec	2	3/3/2016 8:37:42 PM	24035
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.046	0.011	0.040		mg/Kg	2	3/3/2016 8:37:42 PM	24035
Toluene	0.49	0.010	0.10		mg/Kg	2	3/3/2016 8:37:42 PM	24035
Ethylbenzene	0.38	0.0098	0.10		mg/Kg	2	3/3/2016 8:37:42 PM	24035
Xylenes, Total	2.2	0.029	0.20		mg/Kg	2	3/3/2016 8:37:42 PM	24035
Surr: 4-Bromofluorobenzene	128	0	80-120	S	%Rec	2	3/3/2016 8:37:42 PM	24035
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	27	190	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
1-Methylnaphthalene	59	28	190	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
2-Methylnaphthalene	86	27	190	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Acenaphthylene	ND	26	190	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Acenaphthene	ND	23	190	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Fluorene	16	2.5	23	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Phenanthrene	46	1.2	11	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Anthracene	2.3	1.8	11	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Fluoranthene	5.2	2.5	15	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Pyrene	5.5	2.6	19	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Benz(a)anthracene	4.2	0.38	7.6	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Chrysene	37	1.1	7.6	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Benzo(b)fluoranthene	1.5	0.54	7.6	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Benzo(k)fluoranthene	0.38	0.31	7.6	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Benzo(a)pyrene	ND	0.31	7.6	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Dibenz(a,h)anthracene	ND	0.38	7.6	D	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Benzo(g,h,i)perylene	0.57	0.46	7.6	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Indeno(1,2,3-cd)pyrene	2.9	0.61	7.6	JD	mg/Kg	20	3/8/2016 5:15:25 PM	24059
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	20	3/8/2016 5:15:25 PM	24059
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00050	0.020		mg/L	1	3/4/2016 5:58:37 AM	24071
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Arsenic	ND	0.011	5.0		mg/L	1	3/9/2016 7:49:11 AM	24070
Barium	1.1	0.00060	100	J	mg/L	1	3/9/2016 7:49:11 AM	24070

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #2

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 10:55:00 AM

Lab ID: 1603068-002

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Cadmium	ND	0.00090	1.0		mg/L	1	3/9/2016 7:49:11 AM	24070
Chromium	0.011	0.0014	5.0	J	mg/L	1	3/9/2016 7:49:11 AM	24070
Lead	ND	0.0013	5.0		mg/L	1	3/9/2016 7:49:11 AM	24070
Selenium	ND	0.019	1.0		mg/L	1	3/9/2016 7:49:11 AM	24070
Silver	ND	0.0013	5.0		mg/L	1	3/9/2016 7:49:11 AM	24070
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	3/4/2016 7:18:43 PM	24087
3+4-Methylphenol	ND	0.14	200		mg/L	1	3/4/2016 7:18:43 PM	24087
Phenol	ND	200	200		mg/L	1	3/4/2016 7:18:43 PM	24087
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	3/4/2016 7:18:43 PM	24087
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	3/4/2016 7:18:43 PM	24087
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	3/4/2016 7:18:43 PM	24087
Hexachloroethane	ND	0.038	3.0		mg/L	1	3/4/2016 7:18:43 PM	24087
Nitrobenzene	ND	0.039	2.0		mg/L	1	3/4/2016 7:18:43 PM	24087
Pentachlorophenol	ND	0.031	100		mg/L	1	3/4/2016 7:18:43 PM	24087
Pyridine	ND	0.032	5.0		mg/L	1	3/4/2016 7:18:43 PM	24087
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	3/4/2016 7:18:43 PM	24087
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	3/4/2016 7:18:43 PM	24087
Cresols, Total	ND	0.17	200		mg/L	1	3/4/2016 7:18:43 PM	24087
Surr: 2-Fluorophenol	68.5	0	19-121		%Rec	1	3/4/2016 7:18:43 PM	24087
Surr: Phenol-d5	50.4	0	31.8-117		%Rec	1	3/4/2016 7:18:43 PM	24087
Surr: 2,4,6-Tribromophenol	93.6	0	31.3-139		%Rec	1	3/4/2016 7:18:43 PM	24087
Surr: Nitrobenzene-d5	104	0	48.2-128		%Rec	1	3/4/2016 7:18:43 PM	24087
Surr: 2-Fluorobiphenyl	104	0	58.4-114		%Rec	1	3/4/2016 7:18:43 PM	24087
Surr: 4-Terphenyl-d14	105	0	17.4-141		%Rec	1	3/4/2016 7:18:43 PM	24087
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	ND	0.20	0.50		ppm	10	3/3/2016 12:48:14 PM	24035
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	3/3/2016 12:48:14 PM	24035
2-Butanone	0.48	0.29	200	J	ppm	10	3/3/2016 12:48:14 PM	24035
Carbon tetrachloride	ND	0.033	0.50		ppm	10	3/3/2016 12:48:14 PM	24035
Chlorobenzene	ND	0.041	100		ppm	10	3/3/2016 12:48:14 PM	24035
Chloroform	ND	0.038	6.0		ppm	10	3/3/2016 12:48:14 PM	24035
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	3/3/2016 12:48:14 PM	24035
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	3/3/2016 12:48:14 PM	24035
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	3/3/2016 12:48:14 PM	24035
Trichloroethene (TCE)	ND	0.053	0.50		ppm	10	3/3/2016 12:48:14 PM	24035
Vinyl chloride	ND	0.041	0.20		ppm	10	3/3/2016 12:48:14 PM	24035
Surr: 1,2-Dichloroethane-d4	99.4		70-130		%Rec	10	3/3/2016 12:48:14 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1603068**

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #2

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 10:55:00 AM

Lab ID: 1603068-002

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	109		70-130		%Rec	10	3/3/2016 12:48:14 PM	24035
Surr: Dibromofluoromethane	98.1		70-130		%Rec	10	3/3/2016 12:48:14 PM	24035
Surr: Toluene-d8	104		70-130		%Rec	10	3/3/2016 12:48:14 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #3

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 11:00:00 AM

Lab ID: 1603068-003

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 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)	40000	340	940		mg/Kg	100	3/3/2016 11:41:38 AM	24026
Motor Oil Range Organics (MRO)	46000	4700	4700		mg/Kg	100	3/3/2016 11:41:38 AM	24026
Surr: DNOP	0	0	70-130	S	%Rec	100	3/3/2016 11:41:38 AM	24026
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	97	5.2	25		mg/Kg	5	3/3/2016 9:01:19 PM	24035
Surr: BFB	183	0	66.2-112	S	%Rec	5	3/3/2016 9:01:19 PM	24035
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.11	0.028	0.10		mg/Kg	5	3/3/2016 9:01:19 PM	24035
Toluene	1.8	0.026	0.25		mg/Kg	5	3/3/2016 9:01:19 PM	24035
Ethylbenzene	1.4	0.024	0.25		mg/Kg	5	3/3/2016 9:01:19 PM	24035
Xylenes, Total	7.2	0.072	0.50		mg/Kg	5	3/3/2016 9:01:19 PM	24035
Surr: 4-Bromofluorobenzene	126	0	80-120	S	%Rec	5	3/3/2016 9:01:19 PM	24035
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	28	200	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
1-Methylnaphthalene	35	30	200	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
2-Methylnaphthalene	50	28	200	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Acenaphthylene	ND	27	200	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Acenaphthene	ND	24	200	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Fluorene	11	2.6	24	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Phenanthrene	35	1.3	12	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Anthracene	ND	1.9	12	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Fluoranthene	2.8	2.6	16	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Pyrene	4.2	2.7	20	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Benz(a)anthracene	3.2	0.40	8.0	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Chrysene	28	1.1	8.0	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Benzo(b)fluoranthene	1.0	0.56	8.0	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Benzo(k)fluoranthene	1.0	0.32	8.0	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Benzo(a)pyrene	0.40	0.32	8.0	JD	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Dibenz(a,h)anthracene	ND	0.40	8.0	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Benzo(g,h,i)perylene	ND	0.48	8.0	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Indeno(1,2,3-cd)pyrene	ND	0.64	8.0	D	mg/Kg	20	3/8/2016 5:44:45 PM	24059
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	20	3/8/2016 5:44:45 PM	24059
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00050	0.020		mg/L	1	3/4/2016 6:00:35 AM	24071
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Arsenic	ND	0.011	5.0		mg/L	1	3/9/2016 7:51:04 AM	24070
Barium	1.1	0.00060	100	J	mg/L	1	3/9/2016 7:51:04 AM	24070

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #3

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 11:00:00 AM

Lab ID: 1603068-003

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Cadmium	ND	0.00090	1.0		mg/L	1	3/9/2016 7:51:04 AM	24070
Chromium	0.015	0.0014	5.0	J	mg/L	1	3/9/2016 7:51:04 AM	24070
Lead	0.0070	0.0013	5.0	J	mg/L	1	3/9/2016 7:51:04 AM	24070
Selenium	ND	0.019	1.0		mg/L	1	3/9/2016 7:51:04 AM	24070
Silver	ND	0.0013	5.0		mg/L	1	3/9/2016 7:51:04 AM	24070
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	3/4/2016 7:49:05 PM	24087
3+4-Methylphenol	ND	0.14	200		mg/L	1	3/4/2016 7:49:05 PM	24087
Phenol	ND	200	200		mg/L	1	3/4/2016 7:49:05 PM	24087
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	3/4/2016 7:49:05 PM	24087
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	3/4/2016 7:49:05 PM	24087
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	3/4/2016 7:49:05 PM	24087
Hexachloroethane	ND	0.038	3.0		mg/L	1	3/4/2016 7:49:05 PM	24087
Nitrobenzene	ND	0.039	2.0		mg/L	1	3/4/2016 7:49:05 PM	24087
Pentachlorophenol	ND	0.031	100		mg/L	1	3/4/2016 7:49:05 PM	24087
Pyridine	ND	0.032	5.0		mg/L	1	3/4/2016 7:49:05 PM	24087
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	3/4/2016 7:49:05 PM	24087
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	3/4/2016 7:49:05 PM	24087
Cresols, Total	ND	0.17	200		mg/L	1	3/4/2016 7:49:05 PM	24087
Surr: 2-Fluorophenol	68.1	0	19-121		%Rec	1	3/4/2016 7:49:05 PM	24087
Surr: Phenol-d5	49.0	0	31.8-117		%Rec	1	3/4/2016 7:49:05 PM	24087
Surr: 2,4,6-Tribromophenol	92.4	0	31.3-139		%Rec	1	3/4/2016 7:49:05 PM	24087
Surr: Nitrobenzene-d5	105	0	48.2-128		%Rec	1	3/4/2016 7:49:05 PM	24087
Surr: 2-Fluorobiphenyl	106	0	58.4-114		%Rec	1	3/4/2016 7:49:05 PM	24087
Surr: 4-Terphenyl-d14	112	0	17.4-141		%Rec	1	3/4/2016 7:49:05 PM	24087
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	ND	0.20	0.50		ppm	10	3/3/2016 1:16:35 PM	24035
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	3/3/2016 1:16:35 PM	24035
2-Butanone	0.96	0.29	200	J	ppm	10	3/3/2016 1:16:35 PM	24035
Carbon tetrachloride	ND	0.033	0.50		ppm	10	3/3/2016 1:16:35 PM	24035
Chlorobenzene	ND	0.041	100		ppm	10	3/3/2016 1:16:35 PM	24035
Chloroform	ND	0.038	6.0		ppm	10	3/3/2016 1:16:35 PM	24035
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	3/3/2016 1:16:35 PM	24035
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	3/3/2016 1:16:35 PM	24035
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	3/3/2016 1:16:35 PM	24035
Trichloroethene (TCE)	ND	0.054	0.50		ppm	10	3/3/2016 1:16:35 PM	24035
Vinyl chloride	ND	0.041	0.20		ppm	10	3/3/2016 1:16:35 PM	24035
Surr: 1,2-Dichloroethane-d4	97.3		70-130		%Rec	10	3/3/2016 1:16:35 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1603068**

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #3

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 11:00:00 AM

Lab ID: 1603068-003

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	109		70-130		%Rec	10	3/3/2016 1:16:35 PM	24035
Surr: Dibromofluoromethane	98.3		70-130		%Rec	10	3/3/2016 1:16:35 PM	24035
Surr: Toluene-d8	102		70-130		%Rec	10	3/3/2016 1:16:35 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #4

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 11:05:00 AM

Lab ID: 1603068-004

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 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)	40000	340	950		mg/Kg	100	3/3/2016 12:24:31 PM	24026
Motor Oil Range Organics (MRO)	50000	4700	4700		mg/Kg	100	3/3/2016 12:24:31 PM	24026
Surr: DNOP	0	0	70-130	S	%Rec	100	3/3/2016 12:24:31 PM	24026
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	140	10	50		mg/Kg	10	3/3/2016 11:36:45 AM	24035
Surr: BFB	159	0	66.2-112	S	%Rec	10	3/3/2016 11:36:45 AM	24035
EPA METHOD 8021B: VOLATILES							Analyst: NSB	
Benzene	0.41	0.057	0.20		mg/Kg	10	3/3/2016 11:36:45 AM	24035
Toluene	3.8	0.051	0.50		mg/Kg	10	3/3/2016 11:36:45 AM	24035
Ethylbenzene	2.2	0.049	0.50		mg/Kg	10	3/3/2016 11:36:45 AM	24035
Xylenes, Total	11	0.14	1.0		mg/Kg	10	3/3/2016 11:36:45 AM	24035
Surr: 4-Bromofluorobenzene	126	0	80-120	S	%Rec	10	3/3/2016 11:36:45 AM	24035
EPA METHOD 8310: PAHS							Analyst: SCC	
Naphthalene	ND	23	170	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
1-Methylnaphthalene	43	25	170	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
2-Methylnaphthalene	63	23	170	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Acenaphthylene	ND	22	170	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Acenaphthene	ND	20	170	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Fluorene	12	2.2	20	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Phenanthrene	38	1.1	10	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Anthracene	1.7	1.6	10	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Fluoranthene	4.8	2.2	13	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Pyrene	4.5	2.3	17	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Benz(a)anthracene	3.3	0.33	6.6	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Chrysene	29	0.93	6.6	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Benzo(b)fluoranthene	1.0	0.47	6.6	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Benzo(k)fluoranthene	1.0	0.27	6.6	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Benzo(a)pyrene	ND	0.27	6.6	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Dibenz(a,h)anthracene	1.2	0.33	6.6	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Benzo(g,h,i)perylene	ND	0.40	6.6	D	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Indeno(1,2,3-cd)pyrene	1.3	0.53	6.6	JD	mg/Kg	20	3/8/2016 6:14:04 PM	24059
Surr: Benzo(e)pyrene	0	0	30.6-128	SD	%Rec	20	3/8/2016 6:14:04 PM	24059
MERCURY, TCLP							Analyst: pmf	
Mercury	ND	0.00050	0.020		mg/L	1	3/4/2016 6:02:34 AM	24071
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Arsenic	ND	0.011	5.0		mg/L	1	3/9/2016 7:52:58 AM	24070
Barium	1.2	0.00060	100	J	mg/L	1	3/9/2016 7:52:58 AM	24070

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1603068

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #4

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 11:05:00 AM

Lab ID: 1603068-004

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS							Analyst: MED	
Cadmium	ND	0.00090	1.0		mg/L	1	3/9/2016 7:52:58 AM	24070
Chromium	0.0077	0.0014	5.0	J	mg/L	1	3/9/2016 7:52:58 AM	24070
Lead	0.0021	0.0013	5.0	J	mg/L	1	3/9/2016 7:52:58 AM	24070
Selenium	ND	0.019	1.0		mg/L	1	3/9/2016 7:52:58 AM	24070
Silver	ND	0.0013	5.0		mg/L	1	3/9/2016 7:52:58 AM	24070
EPA METHOD 8270C TCLP							Analyst: DAM	
2-Methylphenol	ND	0.033	200		mg/L	1	3/4/2016 8:19:17 PM	24087
3+4-Methylphenol	ND	0.14	200		mg/L	1	3/4/2016 8:19:17 PM	24087
Phenol	ND	200	200		mg/L	1	3/4/2016 8:19:17 PM	24087
2,4-Dinitrotoluene	ND	0.023	0.13		mg/L	1	3/4/2016 8:19:17 PM	24087
Hexachlorobenzene	ND	0.022	0.13		mg/L	1	3/4/2016 8:19:17 PM	24087
Hexachlorobutadiene	ND	0.039	0.50		mg/L	1	3/4/2016 8:19:17 PM	24087
Hexachloroethane	ND	0.038	3.0		mg/L	1	3/4/2016 8:19:17 PM	24087
Nitrobenzene	ND	0.039	2.0		mg/L	1	3/4/2016 8:19:17 PM	24087
Pentachlorophenol	ND	0.031	100		mg/L	1	3/4/2016 8:19:17 PM	24087
Pyridine	ND	0.032	5.0		mg/L	1	3/4/2016 8:19:17 PM	24087
2,4,5-Trichlorophenol	ND	0.026	400		mg/L	1	3/4/2016 8:19:17 PM	24087
2,4,6-Trichlorophenol	ND	0.028	2.0		mg/L	1	3/4/2016 8:19:17 PM	24087
Cresols, Total	ND	0.17	200		mg/L	1	3/4/2016 8:19:17 PM	24087
Surr: 2-Fluorophenol	61.8	0	19-121		%Rec	1	3/4/2016 8:19:17 PM	24087
Surr: Phenol-d5	45.1	0	31.8-117		%Rec	1	3/4/2016 8:19:17 PM	24087
Surr: 2,4,6-Tribromophenol	89.1	0	31.3-139		%Rec	1	3/4/2016 8:19:17 PM	24087
Surr: Nitrobenzene-d5	91.4	0	48.2-128		%Rec	1	3/4/2016 8:19:17 PM	24087
Surr: 2-Fluorobiphenyl	93.4	0	58.4-114		%Rec	1	3/4/2016 8:19:17 PM	24087
Surr: 4-Terphenyl-d14	75.2	0	17.4-141		%Rec	1	3/4/2016 8:19:17 PM	24087
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Benzene	0.36	0.20	0.50	J	ppm	10	3/3/2016 1:44:53 PM	24035
1,2-Dichloroethane (EDC)	ND	0.13	0.50		ppm	10	3/3/2016 1:44:53 PM	24035
2-Butanone	1.5	0.28	200	J	ppm	10	3/3/2016 1:44:53 PM	24035
Carbon tetrachloride	ND	0.033	0.50		ppm	10	3/3/2016 1:44:53 PM	24035
Chlorobenzene	ND	0.041	100		ppm	10	3/3/2016 1:44:53 PM	24035
Chloroform	ND	0.038	6.0		ppm	10	3/3/2016 1:44:53 PM	24035
1,4-Dichlorobenzene	ND	0.062	7.5		ppm	10	3/3/2016 1:44:53 PM	24035
1,1-Dichloroethene	ND	0.16	0.70		ppm	10	3/3/2016 1:44:53 PM	24035
Tetrachloroethene (PCE)	ND	0.041	0.70		ppm	10	3/3/2016 1:44:53 PM	24035
Trichloroethene (TCE)	ND	0.053	0.50		ppm	10	3/3/2016 1:44:53 PM	24035
Vinyl chloride	ND	0.041	0.20		ppm	10	3/3/2016 1:44:53 PM	24035
Surr: 1,2-Dichloroethane-d4	96.4		70-130		%Rec	10	3/3/2016 1:44:53 PM	24035

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1603068**

Date Reported: 3/14/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FCC 714 #4

Project: FCC TK 714 Overflow

Collection Date: 3/1/2016 11:05:00 AM

Lab ID: 1603068-004

Matrix: SOIL

Received Date: 3/1/2016 4:40:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF	
Surr: 4-Bromofluorobenzene	112		70-130		%Rec	10	3/3/2016 1:44:53 PM	24035
Surr: Dibromofluoromethane	97.4		70-130		%Rec	10	3/3/2016 1:44:53 PM	24035
Surr: Toluene-d8	103		70-130		%Rec	10	3/3/2016 1:44:53 PM	24035

Refer to the QC Summary report and 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



Collected date/time: 03/01/16 10:45

L821147

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND	<u>04</u>	1.25	5	03/04/2016 13:49	<u>WG853994</u>

Wet Chemistry by Method 9034-9030B

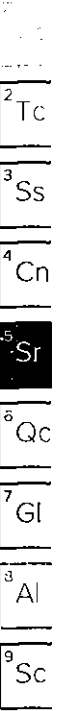
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	03/04/2016 21:10	<u>WG853682</u>

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity	Non-Corrosive		1	03/04/2016 08:39	<u>WG853797</u>

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170 F		1	03/03/2016 17:11	<u>WG853775</u>





Collected date/time: 03/01/16 10:55

L821147

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND	J4	0.250	1	03/04/2016 12:42	WG853994

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Sulfide	26.9		25.0	1	03/04/2016 21:10	WG853682

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity	Non-Corrosive		1	03/04/2016 08:39	WG853797

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170 F		1	03/03/2016 17:11	WG853775

2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc



Collected date/time: 03/01/16 11:00

L821147

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND	J4	0.250	1	03/04/2016 12:43	WG853994

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	03/04/2016 21:10	WG853682

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity	Non-Corrosive		1	03/04/2016 08:39	WG853797

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170 F		1	03/03/2016 17:11	WG853775



Tc



Ss



Cn



Sr



Qc



Gl



Al



Sc



Collected date/time: 03/01/16 11:05

LA21147

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND	J4	0.250	1	03/04/2016 12:44	WG853994

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Sulfide	51.8		25.0	1	03/04/2016 21:10	WG853682

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity	Non-Corrosive		1	03/04/2016 08:39	WG853797

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170 F		1	03/03/2016 17:11	WG853775





Method Blank (MB)

(MB) 03/04/16 12:36

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Reactive Cyanide	ND		0.250

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

(LCS) 03/04/16 12:37 • (LCSD) 03/04/16 12:38

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 Cyanide	53.9	11.3	11.0	21.0	20.0	50.0-150	J4	J4	3.00	20

5	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gi
8	Al
9	Sc



Method Blank (MB)

(MB) 03/04/16 21:10

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Reactive Sulfide	ND		25.0

L821147-01 Original Sample (OS) • Duplicate (DUP)

(OS) 03/04/16 21:10 • (DUP) 03/04/16 21:10

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

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

(LCS) 03/04/16 21:10 • (LCSD) 03/04/16 21:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	LCSD Result mg/kg	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Reactive Sulfide	100	118	118	110	110	70.0-130			7.02	20

L821147-01 Original Sample (OS) • Duplicate (DUP)

(OS) 03/04/16 08:39 • (DUP) 03/04/16 08:39

Original Result		DUP Result	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Analyte						
Corrosivity	Non-Corrosive	Non-Corrosive	1	0.000		10

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

(LCS) 03/04/16 08:39 • (LCSD) 03/04/16 08:39

Spike Amount		LCS Result	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCSD Qualifier	LCS Qualifier	RPD %	RPD Limits %
Analyte										
Corrosivity	6.31	6.27	6.27	99.4	99.4	98.5-102			0.000	10

Wet Chemistry by Method D93/1010A

L821147-01,02,03,04

L820737-01 Original Sample (OS) • Duplicate (DUP)

(OS) 03/03/16 17:11 • (DUP) 03/03/16 17:11					
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP RPD Limits
	Deg. F	Deg. F		%	%
Ignitability	145	143	1	1.39	10

L820737-02 Original Sample (OS) • Duplicate (DUP)

(OS) 03/03/16 17:11 • (DUP) 03/03/16 17:11					
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP RPD Limits
	Deg. F	Deg. F		%	%
Ignitability	147	146	1	0.683	10

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

(LCS) 03/03/16 17:11 • (LCSD) 03/03/16 17:11									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCSD Qualifier	RPD	RPD Limits
	Deg. F	Deg. F	Deg. F	%	%	%		%	%
Ignitability	82.0	82.70	82.70	101	101	93.0-107		0.000	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24026	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 24026			RunNo: 32535					
Prep Date:	3/2/2016	Analysis Date: 3/3/2016			SeqNo: 995359		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.7	70	130			

Sample ID	LCS-24026		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24026		RunNo: 32535					
Prep Date:	3/2/2016		Analysis Date: 3/3/2016		SeqNo: 995361		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.8	65.8	136			
Surr: DNOP	4.8		5.000		95.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24035		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 24035		RunNo: 32556					
Prep Date:	3/2/2016		Analysis Date: 3/3/2016		SeqNo: 995976		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	1000		1000		104	66.2	112			

Sample ID	LCS-24035		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24035		RunNo: 32556					
Prep Date:	3/2/2016		Analysis Date: 3/3/2016		SeqNo: 995977		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.9	80	120			
Surr: BFB	1100		1000		113	66.2	112			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24035		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 24035		RunNo: 32556					
Prep Date:	3/2/2016		Analysis Date: 3/3/2016		SeqNo: 996019		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	LCS-24035		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 24035		RunNo: 32556					
Prep Date:	3/2/2016		Analysis Date: 3/3/2016		SeqNo: 996020		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	108	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24035		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	24035		RunNo:	32561			
Prep Date:	3/2/2016		Analysis Date:	3/3/2016		SeqNo:	996286		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	0.47		0.5000		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.55		0.5000		110	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.0	70	130			
Surr: Toluene-d8	0.54		0.5000		107	70	130			

Sample ID	LCS-24035		SampType:	LCS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	LCSS		Batch ID:	24035		RunNo:	32561			
Prep Date:	3/2/2016		Analysis Date:	3/3/2016		SeqNo:	996287		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	70	130			
Chlorobenzene	1.1	0.050	1.000	0	111	70	130			
1,1-Dichloroethene	1.0	0.050	1.000	0	102	70	130			
Trichloroethene (TCE)	1.0	0.050	1.000	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.0	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24059		SampType:	MBLK		TestCode:	EPA Method 8310: PAHs			
Client ID:	PBS		Batch ID:	24059		RunNo:	32656			
Prep Date:	3/3/2016		Analysis Date:	3/8/2016		SeqNo:	999084		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	ND	0.015								
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	0.0025	0.010								J
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	0.0010	0.010								J
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.33		0.5000		66.2	30.6	128			

Sample ID	LCS-24059		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	24059		RunNo:	32656			
Prep Date:	3/3/2016		Analysis Date:	3/8/2016		SeqNo:	999085		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.9	0.25	2.000	0	97.0	33.7	117			
1-Methylnaphthalene	1.9	0.25	2.000	0	95.6	32	119			
2-Methylnaphthalene	1.9	0.25	2.000	0	93.5	31.8	118			
Acenaphthylene	1.9	0.25	2.000	0	93.9	36.1	123			
Acenaphthene	1.9	0.25	2.000	0	95.0	31.8	118			
Fluorene	0.17	0.030	0.2000	0	87.4	29	120			
Phenanthrene	0.10	0.015	0.1006	0	102	33	114			
Anthracene	0.088	0.015	0.1006	0	87.7	35.6	110			
Fluoranthene	0.22	0.020	0.2006	0	110	34.8	118			
Pyrene	0.21	0.025	0.2000	0	104	34.9	127			
Benz(a)anthracene	0.022	0.010	0.02000	0	109	35.8	117			
Chrysene	0.11	0.010	0.1006	0	106	34.7	119			
Benzo(b)fluoranthene	0.024	0.010	0.02500	0	94.0	40.9	115			
Benzo(k)fluoranthene	0.013	0.010	0.01250	0	106	36.8	118			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	LCS-24059			SampType:	LCS			TestCode:	EPA Method 8310: PAHs		
Client ID:	LCSS			Batch ID:	24059			RunNo:	32656		
Prep Date:	3/3/2016			Analysis Date:	3/8/2016			SeqNo:	999085		
								Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzo(a)pyrene	0.012	0.010	0.01250	0	96.0	40	115				
Dibenz(a,h)anthracene	0.027	0.010	0.02500	0	108	35.8	119				
Benzo(g,h,i)perylene	0.027	0.010	0.02500	0	109	36.8	123				
Indeno(1,2,3-cd)pyrene	0.053	0.010	0.05002	0	106	35.3	117				
Surr: Benzo(e)pyrene	0.35		0.5000		69.6	30.6	128				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24071		SampType: mblk		TestCode: MERCURY, TCLP					
Client ID:	PBW		Batch ID: 24071		RunNo: 32560					
Prep Date:	3/3/2016		Analysis Date: 3/4/2016		SeqNo: 996184		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.020								

Sample ID	LCS-24071		SampType: lcs		TestCode: MERCURY, TCLP					
Client ID:	LCSW		Batch ID: 24071		RunNo: 32560					
Prep Date:	3/3/2016		Analysis Date: 3/4/2016		SeqNo: 996185		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	101	80	120			J

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603068

14-Mar-16

Client: Western Refining Southwest, Gallup

Project: FCC TK 714 Overflow

Sample ID	MB-24070	SampType: MBLK			TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW	Batch ID: 24070			RunNo: 32658					
Prep Date:	3/3/2016	Analysis Date: 3/9/2016			SeqNo: 999173		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	0.0018	100								J
Cadmium	ND	1.0								
Chromium	0.032	5.0								J
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-24070		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 24070		RunNo: 32658					
Prep Date:	3/3/2016		Analysis Date: 3/9/2016		SeqNo: 999174		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.45	5.0	0.5000	0	90.6	80	120			J
Cadmium	0.44	1.0	0.5000	0	87.9	80	120			J
Chromium	0.41	5.0	0.5000	0	82.2	80	120			J
Selenium	0.43	1.0	0.5000	0	86.0	80	120			J
Silver	0.099	5.0	0.1000	0	99.0	80	120			J

Sample ID	LCS-24070		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 24070		RunNo: 32658					
Prep Date:	3/3/2016		Analysis Date: 3/9/2016		SeqNo: 999320		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	100	0.5000	0	93.8	80	120			J
Lead	0.44	5.0	0.5000	0	87.4	80	120			J

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



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: **1603068**

RcptNo: 1

Received by/date:

Logged By: **Ashley Gallegos**

Completed By: **Ashley Gallegos**

Reviewed By:

03/01/16
3/1/2016 4:40:00 PM

3/1/2016 5:22:54 PM

3/02/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

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) _____

Project Manager:

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Project # Tank 714

HEAL No. 110030008

Preservative Type

Container Type and #

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Project # Tank 714

HEAL No. 110030008

Preservative Type

Container Type and #

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

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9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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HEAL No. 110030008

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Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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HEAL No. 110030008

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N/A

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Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Project # Tank 714

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9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

9 OZ -3

N/A

Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Project # Tank 714

HEAL No. 110030008

Preservative Type

Container Type and #

9 OZ -3

N/A

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N/A

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N/A

9 OZ -3

N/A

Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Project # Tank 714

HEAL No. 110030008

Preservative Type

Container Type and #

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N/A

9 OZ -3

N/A

Project Name: FCC TK 714 Overflow

Project #: FCC Overflow-Composite

Project Manager: Beck Larsen

PO # 20825281

Beck Larsen

Sampler: CTI/JG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Project # Tank 714

HEAL No. 110030008

Preservative Type

Container Type and #

9 OZ -3

N/A

9 OZ -3

N/A



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

July 26, 2016

Ed Riege

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: Tank 714 Confirmation Sampling

OrderNo.: 1606870

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/15/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:10:00 PM

Lab ID: 1606870-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	5900	170	930		mg/Kg	100	6/20/2016 2:18:07 PM	25888
Motor Oil Range Organics (MRO)	7300	4700	4700		mg/Kg	100	6/20/2016 2:18:07 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	100	6/20/2016 2:18:07 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.65	3.2		mg/Kg	1	6/24/2016 3:12:12 PM	R35158
Surr: BFB	100	0	80-120		%Rec	1	6/24/2016 3:12:12 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.015	0.00056	0.033	J	mg/Kg	1	6/24/2016 12:42:04 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	2.3	4.9		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Arsenic	2.1	1.4	4.9	J	mg/Kg	2	6/27/2016 12:48:07 PM	26038
Barium	330	0.096	0.20		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Beryllium	0.67	0.0091	0.30		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Cadmium	ND	0.13	0.20		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Chromium	8.4	0.25	0.59		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Cobalt	3.7	0.075	0.59		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Lead	5.0	0.35	0.49		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Nickel	6.6	0.23	0.99		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Selenium	ND	2.2	4.9		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Silver	ND	0.063	0.49		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Vanadium	16	0.069	4.9		mg/Kg	2	6/27/2016 12:48:07 PM	26038
Zinc	17	1.1	4.9		mg/Kg	2	6/27/2016 12:48:07 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	8.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Acenaphthylene	ND	8.1	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Aniline	ND	9.5	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Anthracene	ND	6.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Azobenzene	ND	12	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benz(a)anthracene	ND	8.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benzo(a)pyrene	ND	7.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benzo(b)fluoranthene	ND	9.0	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benzo(g,h,i)perylene	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benzo(k)fluoranthene	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benzoic acid	ND	8.3	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Benzyl alcohol	ND	7.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Bis(2-chloroethoxy)methane	ND	11	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Bis(2-chloroethyl)ether	ND	7.4	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:10:00 PM

Lab ID: 1606870-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	8.9	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Bis(2-ethylhexyl)phthalate	ND	8.2	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4-Bromophenyl phenyl ether	ND	9.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Butyl benzyl phthalate	ND	8.9	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Carbazole	ND	6.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4-Chloro-3-methylphenol	ND	12	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4-Chloroaniline	ND	11	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2-Chloronaphthalene	ND	7.9	25	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2-Chlorophenol	ND	7.9	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4-Chlorophenyl phenyl ether	ND	11	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Chrysene	ND	8.5	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Di-n-butyl phthalate	ND	7.5	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Di-n-octyl phthalate	ND	8.5	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Dibenz(a,h)anthracene	ND	8.1	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Dibenzofuran	ND	10	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
1,2-Dichlorobenzene	ND	7.7	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
1,3-Dichlorobenzene	ND	7.7	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
1,4-Dichlorobenzene	ND	8.5	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
3,3'-Dichlorobenzidine	ND	7.4	25	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Diethyl phthalate	ND	10	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Dimethyl phthalate	ND	9.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,4-Dichlorophenol	ND	9.3	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,4-Dimethylphenol	ND	11	30	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4,6-Dinitro-2-methylphenol	ND	6.1	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,4-Dinitrophenol	ND	6.6	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,4-Dinitrotoluene	ND	8.9	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,6-Dinitrotoluene	ND	11	50	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Fluoranthene	ND	5.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Fluorene	ND	9.2	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Hexachlorobenzene	ND	7.9	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Hexachlorobutadiene	ND	11	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Hexachlorocyclopentadiene	ND	11	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Hexachloroethane	ND	8.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Indeno(1,2,3-cd)pyrene	ND	7.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
1-Methylnaphthalene	ND	10	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2-Methylnaphthalene	ND	12	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2-Methylphenol	ND	8.4	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
3+4-Methylphenol	ND	7.2	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
N-Nitrosodi-n-propylamine	ND	9.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:10:00 PM

Lab ID: 1606870-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	9.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Naphthalene	ND	9.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2-Nitroaniline	ND	11	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
3-Nitroaniline	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4-Nitroaniline	ND	7.1	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Nitrobenzene	ND	10	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2-Nitrophenol	ND	9.9	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
4-Nitrophenol	ND	7.6	25	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Pentachlorophenol	ND	6.4	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Phenanthrene	ND	6.8	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Phenol	ND	7.5	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Pyrene	ND	7.6	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Pyridine	ND	7.9	40	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
1,2,4-Trichlorobenzene	ND	11	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,4,5-Trichlorophenol	ND	10	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
2,4,6-Trichlorophenol	ND	8.3	20	D	mg/Kg	10	6/22/2016 3:17:16 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	10	6/22/2016 3:17:16 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	10	6/22/2016 3:17:16 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	10	6/22/2016 3:17:16 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	10	6/22/2016 3:17:16 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	10	6/22/2016 3:17:16 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	10	6/22/2016 3:17:16 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Toluene	1.71	0.200	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Ethylbenzene	ND	0.223	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.278	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2,4-Trimethylbenzene	12.9	0.281	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,3,5-Trimethylbenzene	4.22	0.273	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Naphthalene	20.3	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1-Methylnaphthalene	89.3	0.188	3.31	E	µg/Kg	1	6/24/2016 3:27:00 PM	26053
2-Methylnaphthalene	82.8	0.436	3.31	E	µg/Kg	1	6/24/2016 3:27:00 PM	26053
Acetone	47.8	0.490	8.28		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Bromobenzene	ND	0.168	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Bromodichloromethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Bromoform	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Bromomethane	ND	0.298	2.48		µg/Kg	1	6/24/2016 3:27:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:10:00 PM

Lab ID: 1606870-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	8.26	0.597	8.28	J	µg/Kg	1	6/24/2016 3:27:00 PM	26053
Carbon disulfide	ND	0.612	8.28		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Carbon tetrachloride	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Chlorobenzene	ND	0.190	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Chloroethane	ND	0.306	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Chloroform	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Chloromethane	ND	0.419	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
2-Chlorotoluene	ND	0.282	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
4-Chlorotoluene	ND	0.275	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
cis-1,2-DCE	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
cis-1,3-Dichloropropene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.176	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Dibromochloromethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Dibromomethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2-Dichlorobenzene	ND	0.241	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,3-Dichlorobenzene	ND	0.306	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,4-Dichlorobenzene	ND	0.310	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Dichlorodifluoromethane	ND	0.967	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1-Dichloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1-Dichloroethene	ND	0.271	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2-Dichloropropane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,3-Dichloropropane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
2,2-Dichloropropane	ND	0.209	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1-Dichloropropene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Hexachlorobutadiene	ND	0.377	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
2-Hexanone	4.54	0.412	8.28	J	µg/Kg	1	6/24/2016 3:27:00 PM	26053
Isopropylbenzene	ND	0.208	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
4-Isopropyltoluene	2.29	0.311	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
4-Methyl-2-pentanone	ND	3.31	8.28		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Methylene chloride	ND	1.66	2.48		µg/Kg	1	6/24/2016 3:27:00 PM	26053
n-Butylbenzene	3.28	0.403	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
n-Propylbenzene	0.571	0.296	1.66	J	µg/Kg	1	6/24/2016 3:27:00 PM	26053
sec-Butylbenzene	2.07	0.294	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Styrene	ND	0.212	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
tert-Butylbenzene	ND	0.242	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Tetrachloroethene (PCE)	ND	0.218	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
trans-1,2-DCE	ND	0.167	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:10:00 PM

Lab ID: 1606870-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.200	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.401	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.502	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1,1-Trichloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,1,2-Trichloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Trichloroethene (TCE)	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Trichlorofluoromethane	ND	0.208	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
1,2,3-Trichloropropane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Vinyl chloride	ND	0.436	1.66		µg/Kg	1	6/24/2016 3:27:00 PM	26053
Xylenes, Total	1.06	0.660	1.66	J	µg/Kg	1	6/24/2016 3:27:00 PM	26053
Surr: 1,2-Dichloroethane-d4	145	0	70-130	S	%Rec	1	6/24/2016 3:27:00 PM	26053
Surr: 4-Bromofluorobenzene	197	0	70-130	S	%Rec	1	6/24/2016 3:27:00 PM	26053
Surr: Dibromofluoromethane	108	0	70-130		%Rec	1	6/24/2016 3:27:00 PM	26053
Surr: Toluene-d8	125	0	70-130		%Rec	1	6/24/2016 3:27:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--2 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:25:00 PM

Lab ID: 1606870-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	2500	18	97		mg/Kg	10	6/20/2016 3:02:23 PM	25888
Motor Oil Range Organics (MRO)	3700	480	480		mg/Kg	10	6/20/2016 3:02:23 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	10	6/20/2016 3:02:23 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.82	4.0		mg/Kg	1	6/24/2016 3:35:50 PM	R35158
Surr: BFB	103	0	80-120		%Rec	1	6/24/2016 3:35:50 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.057	0.00056	0.033		mg/Kg	1	6/24/2016 12:43:54 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Arsenic	1.3	0.73	2.5	J	mg/Kg	1	6/27/2016 12:50:06 PM	26038
Barium	710	0.24	0.50		mg/Kg	5	6/27/2016 2:42:37 PM	26038
Beryllium	0.67	0.0046	0.15		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Cadmium	0.092	0.063	0.10	J	mg/Kg	1	6/27/2016 12:50:06 PM	26038
Chromium	8.1	0.12	0.30		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Cobalt	3.7	0.038	0.30		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Lead	8.8	0.17	0.25		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Nickel	6.9	0.11	0.50		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Vanadium	15	0.035	2.5		mg/Kg	1	6/27/2016 12:50:06 PM	26038
Zinc	23	0.57	2.5		mg/Kg	1	6/27/2016 12:50:06 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	8.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Acenaphthylene	ND	8.1	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Aniline	ND	9.4	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Anthracene	ND	6.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Azobenzene	ND	12	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benz(a)anthracene	ND	8.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benzo(a)pyrene	ND	7.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benzo(b)fluoranthene	ND	9.0	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benzo(g,h,i)perylene	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benzo(k)fluoranthene	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benzoic acid	ND	8.3	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Benzyl alcohol	ND	7.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Bis(2-chloroethoxy)methane	ND	11	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Bis(2-chloroethyl)ether	ND	7.3	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938

Refer to the QC Summary report and 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: T-714--2 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:25:00 PM

Lab ID: 1606870-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	8.9	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Bis(2-ethylhexyl)phthalate	ND	8.1	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4-Bromophenyl phenyl ether	ND	9.5	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Butyl benzyl phthalate	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Carbazole	ND	6.7	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4-Chloro-3-methylphenol	ND	12	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4-Chloroaniline	ND	11	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2-Chloronaphthalene	ND	7.9	25	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2-Chlorophenol	ND	7.9	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4-Chlorophenyl phenyl ether	ND	11	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Chrysene	ND	8.5	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Di-n-butyl phthalate	ND	7.5	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Di-n-octyl phthalate	ND	8.5	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Dibenz(a,h)anthracene	ND	8.1	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Dibenzofuran	ND	10	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
1,2-Dichlorobenzene	ND	7.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
1,3-Dichlorobenzene	ND	7.7	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
1,4-Dichlorobenzene	ND	8.4	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
3,3'-Dichlorobenzidine	ND	7.4	25	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Diethyl phthalate	ND	10	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Dimethyl phthalate	ND	9.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,4-Dichlorophenol	ND	9.3	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,4-Dimethylphenol	ND	11	30	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4,6-Dinitro-2-methylphenol	ND	6.0	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,4-Dinitrophenol	ND	6.6	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,4-Dinitrotoluene	ND	8.9	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,6-Dinitrotoluene	ND	11	50	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Fluoranthene	ND	5.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Fluorene	ND	9.1	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Hexachlorobenzene	ND	7.9	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Hexachlorobutadiene	ND	11	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Hexachlorocyclopentadiene	ND	11	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Hexachloroethane	ND	8.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Indeno(1,2,3-cd)pyrene	ND	7.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
1-Methylnaphthalene	ND	10	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2-Methylnaphthalene	ND	12	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2-Methylphenol	ND	8.3	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
3+4-Methylphenol	ND	7.2	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
N-Nitrosodi-n-propylamine	ND	9.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--2 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:25:00 PM

Lab ID: 1606870-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	9.7	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Naphthalene	ND	9.6	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2-Nitroaniline	ND	11	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
3-Nitroaniline	ND	8.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4-Nitroaniline	ND	7.0	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Nitrobenzene	ND	10	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2-Nitrophenol	ND	9.9	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
4-Nitrophenol	ND	7.6	25	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Pentachlorophenol	ND	6.4	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Phenanthrene	ND	6.8	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Phenol	ND	7.5	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Pyrene	ND	7.5	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Pyridine	ND	7.9	40	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
1,2,4-Trichlorobenzene	ND	11	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,4,5-Trichlorophenol	ND	10	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
2,4,6-Trichlorophenol	ND	8.3	20	D	mg/Kg	10	6/22/2016 3:45:46 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	10	6/22/2016 3:45:46 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	10	6/22/2016 3:45:46 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	10	6/22/2016 3:45:46 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	10	6/22/2016 3:45:46 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	10	6/22/2016 3:45:46 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	10	6/22/2016 3:45:46 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Toluene	0.738	0.226	1.87	J	µg/Kg	1	6/24/2016 3:52:00 PM	26053
Ethylbenzene	ND	0.251	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.314	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2,4-Trimethylbenzene	3.98	0.317	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,3,5-Trimethylbenzene	1.32	0.308	1.87	J	µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Naphthalene	5.08	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1-Methylnaphthalene	20.5	0.212	3.74		µg/Kg	1	6/24/2016 3:52:00 PM	26053
2-Methylnaphthalene	19.4	0.492	3.74		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Acetone	23.2	0.553	9.34		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Bromobenzene	ND	0.190	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Bromodichloromethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Bromoform	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Bromomethane	ND	0.336	2.80		µg/Kg	1	6/24/2016 3:52:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--2 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:25:00 PM

Lab ID: 1606870-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	2.56	0.674	9.34	J	µg/Kg	1	6/24/2016 3:52:00 PM	26053
Carbon disulfide	ND	0.691	9.34		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Carbon tetrachloride	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Chlorobenzene	ND	0.214	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Chloroethane	ND	0.345	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Chloroform	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Chloromethane	ND	0.473	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
2-Chlorotoluene	ND	0.318	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
4-Chlorotoluene	ND	0.311	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
cis-1,2-DCE	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
cis-1,3-Dichloropropene	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.199	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Dibromochloromethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Dibromomethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2-Dichlorobenzene	ND	0.272	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,3-Dichlorobenzene	ND	0.345	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,4-Dichlorobenzene	ND	0.350	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Dichlorodifluoromethane	ND	1.09	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1-Dichloroethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1-Dichloroethene	ND	0.306	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2-Dichloropropane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,3-Dichloropropane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
2,2-Dichloropropane	ND	0.236	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1-Dichloropropene	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Hexachlorobutadiene	ND	0.426	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
2-Hexanone	ND	0.465	9.34		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Isopropylbenzene	ND	0.235	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
4-Isopropyltoluene	ND	0.351	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
4-Methyl-2-pentanone	ND	3.74	9.34		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Methylene chloride	ND	1.87	2.80		µg/Kg	1	6/24/2016 3:52:00 PM	26053
n-Butylbenzene	ND	0.455	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
n-Propylbenzene	ND	0.335	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
sec-Butylbenzene	ND	0.332	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Styrene	ND	0.239	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
tert-Butylbenzene	ND	0.273	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Tetrachloroethene (PCE)	ND	0.245	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
trans-1,2-DCE	ND	0.189	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup**Client Sample ID:** T-714--2 (0-6")**Project:** Tank 714 Confirmation Sampling**Collection Date:** 6/14/2016 1:25:00 PM**Lab ID:** 1606870-002**Matrix:** SOIL**Received Date:** 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.226	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.452	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.567	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1,1-Trichloroethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,1,2-Trichloroethane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Trichloroethene (TCE)	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Trichlorofluoromethane	ND	0.235	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
1,2,3-Trichloropropane	ND	1.87	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Vinyl chloride	ND	0.491	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Xylenes, Total	ND	0.745	1.87		µg/Kg	1	6/24/2016 3:52:00 PM	26053
Surr: 1,2-Dichloroethane-d4	105	0	70-130		%Rec	1	6/24/2016 3:52:00 PM	26053
Surr: 4-Bromofluorobenzene	149	0	70-130	S	%Rec	1	6/24/2016 3:52:00 PM	26053
Surr: Dibromofluoromethane	88.8	0	70-130		%Rec	1	6/24/2016 3:52:00 PM	26053
Surr: Toluene-d8	110	0	70-130		%Rec	1	6/24/2016 3:52:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--3 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:45:00 PM

Lab ID: 1606870-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	140	1.7	9.3		mg/Kg	1	6/21/2016 10:08:08 AM	25888
Motor Oil Range Organics (MRO)	210	47	47		mg/Kg	1	6/21/2016 10:08:08 AM	25888
Surr: DNOP	103	0	70-130		%Rec	1	6/21/2016 10:08:08 AM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.60	2.9		mg/Kg	1	6/24/2016 3:59:29 PM	R35158
Surr: BFB	96.2	0	80-120		%Rec	1	6/24/2016 3:59:29 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.32	0.0011	0.064		mg/Kg	2	6/24/2016 1:02:22 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	2.3	4.9		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Arsenic	2.4	1.4	4.9	J	mg/Kg	2	6/27/2016 12:55:46 PM	26038
Barium	780	0.24	0.49		mg/Kg	5	6/27/2016 2:44:23 PM	26038
Beryllium	0.47	0.0091	0.30		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Cadmium	ND	0.13	0.20		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Chromium	5.4	0.25	0.59		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Cobalt	3.1	0.075	0.59		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Lead	6.4	0.35	0.49		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Nickel	6.0	0.23	0.99		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Selenium	ND	2.2	4.9		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Silver	ND	0.063	0.49		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Vanadium	16	0.069	4.9		mg/Kg	2	6/27/2016 12:55:46 PM	26038
Zinc	14	1.1	4.9		mg/Kg	2	6/27/2016 12:55:46 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	8.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Acenaphthylene	ND	8.1	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Aniline	ND	9.4	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Anthracene	ND	6.6	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Azobenzene	ND	12	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benz(a)anthracene	ND	8.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benzo(a)pyrene	ND	7.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benzo(b)fluoranthene	ND	9.0	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benzo(g,h,i)perylene	ND	8.8	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benzo(k)fluoranthene	ND	8.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benzoic acid	ND	8.2	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Benzyl alcohol	ND	7.8	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Bis(2-chloroethoxy)methane	ND	11	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Bis(2-chloroethyl)ether	ND	7.3	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--3 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:45:00 PM

Lab ID: 1606870-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	8.9	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Bis(2-ethylhexyl)phthalate	ND	8.1	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4-Bromophenyl phenyl ether	ND	9.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Butyl benzyl phthalate	ND	8.8	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Carbazole	ND	6.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4-Chloro-3-methylphenol	ND	12	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4-Chloroaniline	ND	11	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2-Chloronaphthalene	ND	7.8	25	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2-Chlorophenol	ND	7.8	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4-Chlorophenyl phenyl ether	ND	11	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Chrysene	ND	8.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Di-n-butyl phthalate	ND	7.4	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Di-n-octyl phthalate	ND	8.5	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Dibenz(a,h)anthracene	ND	8.0	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Dibenzofuran	ND	10	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
1,2-Dichlorobenzene	ND	7.6	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
1,3-Dichlorobenzene	ND	7.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
1,4-Dichlorobenzene	ND	8.4	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
3,3'-Dichlorobenzidine	ND	7.3	25	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Diethyl phthalate	ND	10	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Dimethyl phthalate	ND	9.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,4-Dichlorophenol	ND	9.3	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,4-Dimethylphenol	ND	11	30	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4,6-Dinitro-2-methylphenol	ND	6.0	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,4-Dinitrophenol	ND	6.6	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,4-Dinitrotoluene	ND	8.9	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,6-Dinitrotoluene	ND	11	50	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Fluoranthene	ND	5.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Fluorene	ND	9.1	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Hexachlorobenzene	ND	7.8	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Hexachlorobutadiene	ND	11	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Hexachlorocyclopentadiene	ND	11	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Hexachloroethane	ND	8.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Indeno(1,2,3-cd)pyrene	ND	7.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
1-Methylnaphthalene	ND	10	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2-Methylnaphthalene	ND	12	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2-Methylphenol	ND	8.3	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
3+4-Methylphenol	ND	7.2	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
N-Nitrosodi-n-propylamine	ND	9.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--3 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:45:00 PM

Lab ID: 1606870-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	9.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Naphthalene	ND	9.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2-Nitroaniline	ND	11	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
3-Nitroaniline	ND	8.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4-Nitroaniline	ND	7.0	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Nitrobenzene	ND	10	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2-Nitrophenol	ND	9.8	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
4-Nitrophenol	ND	7.6	25	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Pentachlorophenol	ND	6.4	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Phenanthrene	ND	6.7	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Phenol	ND	7.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Pyrene	ND	7.5	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Pyridine	ND	7.9	40	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
1,2,4-Trichlorobenzene	ND	11	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,4,5-Trichlorophenol	ND	9.9	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
2,4,6-Trichlorophenol	ND	8.2	20	D	mg/Kg	10	6/22/2016 4:14:13 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	10	6/22/2016 4:14:13 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	10	6/22/2016 4:14:13 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	10	6/22/2016 4:14:13 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	10	6/22/2016 4:14:13 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	10	6/22/2016 4:14:13 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	10	6/22/2016 4:14:13 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Toluene	0.592	0.181	1.50	J	µg/Kg	1	6/24/2016 4:17:00 PM	26053
Ethylbenzene	ND	0.202	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.252	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2,4-Trimethylbenzene	ND	0.254	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,3,5-Trimethylbenzene	ND	0.248	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Naphthalene	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1-Methylnaphthalene	ND	0.171	3.00		µg/Kg	1	6/24/2016 4:17:00 PM	26053
2-Methylnaphthalene	ND	0.395	3.00		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Acetone	13.1	0.444	7.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Bromobenzene	ND	0.153	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Bromodichloromethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Bromoform	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Bromomethane	ND	0.270	2.25		µg/Kg	1	6/24/2016 4:17:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--3 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:45:00 PM

Lab ID: 1606870-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.541	7.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Carbon disulfide	ND	0.555	7.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Carbon tetrachloride	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Chlorobenzene	ND	0.172	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Chloroethane	ND	0.277	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Chloroform	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Chloromethane	ND	0.380	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
2-Chlorotoluene	ND	0.255	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
4-Chlorotoluene	ND	0.249	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
cis-1,2-DCE	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
cis-1,3-Dichloropropene	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.160	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Dibromochloromethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Dibromomethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2-Dichlorobenzene	ND	0.218	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,3-Dichlorobenzene	ND	0.277	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,4-Dichlorobenzene	ND	0.281	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Dichlorodifluoromethane	ND	0.876	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1-Dichloroethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1-Dichloroethene	ND	0.246	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2-Dichloropropane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,3-Dichloropropane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
2,2-Dichloropropane	ND	0.189	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1-Dichloropropene	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Hexachlorobutadiene	ND	0.342	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
2-Hexanone	ND	0.374	7.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Isopropylbenzene	ND	0.189	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
4-Isopropyltoluene	ND	0.281	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
4-Methyl-2-pentanone	ND	3.00	7.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Methylene chloride	ND	1.50	2.25		µg/Kg	1	6/24/2016 4:17:00 PM	26053
n-Butylbenzene	ND	0.365	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
n-Propylbenzene	ND	0.269	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
sec-Butylbenzene	ND	0.266	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Styrene	ND	0.192	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
tert-Butylbenzene	ND	0.219	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Tetrachloroethene (PCE)	ND	0.197	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
trans-1,2-DCE	ND	0.152	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--3 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 1:45:00 PM

Lab ID: 1606870-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.182	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.363	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.455	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1,1-Trichloroethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,1,2-Trichloroethane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Trichloroethene (TCE)	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Trichlorofluoromethane	ND	0.188	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
1,2,3-Trichloropropane	ND	1.50	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Vinyl chloride	ND	0.395	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Xylenes, Total	ND	0.598	1.50		µg/Kg	1	6/24/2016 4:17:00 PM	26053
Surr: 1,2-Dichloroethane-d4	97.9	0	70-130		%Rec	1	6/24/2016 4:17:00 PM	26053
Surr: 4-Bromofluorobenzene	105	0	70-130		%Rec	1	6/24/2016 4:17:00 PM	26053
Surr: Dibromofluoromethane	79.2	0	70-130		%Rec	1	6/24/2016 4:17:00 PM	26053
Surr: Toluene-d8	106	0	70-130		%Rec	1	6/24/2016 4:17:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--4 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:00:00 PM

Lab ID: 1606870-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	110	1.8	9.9		mg/Kg	1	6/21/2016 11:31:35 AM	25888
Motor Oil Range Organics (MRO)	160	49	49		mg/Kg	1	6/21/2016 11:31:35 AM	25888
Surr: DNOP	96.0	0	70-130		%Rec	1	6/21/2016 11:31:35 AM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.68	3.3		mg/Kg	1	6/24/2016 4:23:06 PM	R35158
Surr: BFB	98.4	0	80-120		%Rec	1	6/24/2016 4:23:06 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.43	0.0011	0.066		mg/Kg	2	6/24/2016 1:04:09 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Arsenic	2.1	0.73	2.5	J	mg/Kg	1	6/27/2016 12:57:56 PM	26038
Barium	710	0.24	0.50		mg/Kg	5	6/27/2016 2:46:13 PM	26038
Beryllium	0.50	0.0046	0.15		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Cadmium	ND	0.063	0.10		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Chromium	6.9	0.12	0.30		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Cobalt	3.0	0.038	0.30		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Lead	3.9	0.17	0.25		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Nickel	5.8	0.11	0.50		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Vanadium	17	0.035	2.5		mg/Kg	1	6/27/2016 12:57:56 PM	26038
Zinc	17	0.57	2.5		mg/Kg	1	6/27/2016 12:57:56 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	4.3	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Acenaphthylene	ND	4.1	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Aniline	ND	4.7	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Anthracene	ND	3.3	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Azobenzene	ND	6.1	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benz(a)anthracene	ND	4.3	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benzo(a)pyrene	ND	3.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benzo(b)fluoranthene	ND	4.5	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benzo(g,h,i)perylene	ND	4.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benzo(k)fluoranthene	ND	4.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benzoic acid	ND	4.1	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Benzyl alcohol	ND	3.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Bis(2-chloroethoxy)methane	ND	5.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Bis(2-chloroethyl)ether	ND	3.7	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--4 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:00:00 PM

Lab ID: 1606870-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	4.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Bis(2-ethylhexyl)phthalate	ND	4.1	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4-Bromophenyl phenyl ether	ND	4.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Butyl benzyl phthalate	ND	4.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Carbazole	ND	3.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4-Chloro-3-methylphenol	ND	5.9	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4-Chloroaniline	ND	5.4	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2-Chloronaphthalene	ND	3.9	12	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2-Chlorophenol	ND	3.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4-Chlorophenyl phenyl ether	ND	5.7	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Chrysene	ND	4.2	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Di-n-butyl phthalate	ND	3.7	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Di-n-octyl phthalate	ND	4.2	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Dibenz(a,h)anthracene	ND	4.0	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Dibenzofuran	ND	5.0	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
1,2-Dichlorobenzene	ND	3.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
1,3-Dichlorobenzene	ND	3.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
1,4-Dichlorobenzene	ND	4.2	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
3,3'-Dichlorobenzidine	ND	3.7	12	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Diethyl phthalate	ND	5.1	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Dimethyl phthalate	ND	4.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,4-Dichlorophenol	ND	4.6	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,4-Dimethylphenol	ND	5.4	15	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4,6-Dinitro-2-methylphenol	ND	3.0	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,4-Dinitrophenol	ND	3.3	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,4-Dinitrotoluene	ND	4.4	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,6-Dinitrotoluene	ND	5.3	25	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Fluoranthene	ND	2.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Fluorene	ND	4.6	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Hexachlorobenzene	ND	3.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Hexachlorobutadiene	ND	5.6	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Hexachlorocyclopentadiene	ND	5.7	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Hexachloroethane	ND	4.3	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Indeno(1,2,3-cd)pyrene	ND	3.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
1-Methylnaphthalene	ND	5.0	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2-Methylnaphthalene	ND	5.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2-Methylphenol	ND	4.2	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
3+4-Methylphenol	ND	3.6	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
N-Nitrosodi-n-propylamine	ND	4.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--4 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:00:00 PM

Lab ID: 1606870-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	4.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Naphthalene	ND	4.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2-Nitroaniline	ND	5.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
3-Nitroaniline	ND	4.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4-Nitroaniline	ND	3.5	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Nitrobenzene	ND	5.1	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2-Nitrophenol	ND	4.9	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
4-Nitrophenol	ND	3.8	12	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Pentachlorophenol	ND	3.2	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Phenanthrene	ND	3.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Phenol	ND	3.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Pyrene	ND	3.8	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Pyridine	ND	3.9	20	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
1,2,4-Trichlorobenzene	ND	5.4	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,4,5-Trichlorophenol	ND	5.0	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
2,4,6-Trichlorophenol	ND	4.1	10	D	mg/Kg	5	6/22/2016 4:42:36 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	5	6/22/2016 4:42:36 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	5	6/22/2016 4:42:36 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	5	6/22/2016 4:42:36 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	5	6/22/2016 4:42:36 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	5	6/22/2016 4:42:36 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	5	6/22/2016 4:42:36 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Toluene	0.543	0.199	1.65	J	µg/Kg	1	6/24/2016 4:42:00 PM	26053
Ethylbenzene	ND	0.221	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.277	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2,4-Trimethylbenzene	ND	0.279	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,3,5-Trimethylbenzene	ND	0.272	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Naphthalene	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1-Methylnaphthalene	ND	0.187	3.29		µg/Kg	1	6/24/2016 4:42:00 PM	26053
2-Methylnaphthalene	ND	0.433	3.29		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Acetone	14.5	0.487	8.23		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Bromobenzene	ND	0.167	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Bromodichloromethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Bromoform	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Bromomethane	ND	0.296	2.47		µg/Kg	1	6/24/2016 4:42:00 PM	26053

Refer to the QC Summary report and 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: T-714--4 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:00:00 PM

Lab ID: 1606870-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.594	8.23		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Carbon disulfide	ND	0.609	8.23		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Carbon tetrachloride	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Chlorobenzene	ND	0.189	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Chloroethane	ND	0.304	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Chloroform	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Chloromethane	ND	0.417	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
2-Chlorotoluene	ND	0.280	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
4-Chlorotoluene	ND	0.274	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
cis-1,2-DCE	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
cis-1,3-Dichloropropene	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.175	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Dibromochloromethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Dibromomethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2-Dichlorobenzene	ND	0.240	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,3-Dichlorobenzene	ND	0.304	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,4-Dichlorobenzene	ND	0.308	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Dichlorodifluoromethane	ND	0.961	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1-Dichloroethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1-Dichloroethene	ND	0.270	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2-Dichloropropane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,3-Dichloropropane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
2,2-Dichloropropane	ND	0.208	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1-Dichloropropene	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Hexachlorobutadiene	ND	0.375	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
2-Hexanone	ND	0.410	8.23		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Isopropylbenzene	ND	0.207	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
4-Isopropyltoluene	ND	0.309	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
4-Methyl-2-pentanone	ND	3.29	8.23		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Methylene chloride	ND	1.65	2.47		µg/Kg	1	6/24/2016 4:42:00 PM	26053
n-Butylbenzene	ND	0.401	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
n-Propylbenzene	ND	0.295	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
sec-Butylbenzene	ND	0.292	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Styrene	ND	0.210	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
tert-Butylbenzene	ND	0.241	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Tetrachloroethene (PCE)	ND	0.216	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
trans-1,2-DCE	ND	0.166	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--4 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:00:00 PM

Lab ID: 1606870-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.199	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.398	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.499	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1,1-Trichloroethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,1,2-Trichloroethane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Trichloroethene (TCE)	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Trichlorofluoromethane	ND	0.207	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
1,2,3-Trichloropropane	ND	1.65	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Vinyl chloride	ND	0.433	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Xylenes, Total	ND	0.656	1.65		µg/Kg	1	6/24/2016 4:42:00 PM	26053
Surr: 1,2-Dichloroethane-d4	104	0	70-130		%Rec	1	6/24/2016 4:42:00 PM	26053
Surr: 4-Bromofluorobenzene	111	0	70-130		%Rec	1	6/24/2016 4:42:00 PM	26053
Surr: Dibromofluoromethane	78.3	0	70-130		%Rec	1	6/24/2016 4:42:00 PM	26053
Surr: Toluene-d8	110	0	70-130		%Rec	1	6/24/2016 4:42:00 PM	26053

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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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--5 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:15:00 PM

Lab ID: 1606870-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	290	17	94		mg/Kg	10	6/20/2016 7:28:16 PM	25888
Motor Oil Range Organics (MRO)	520	470	470		mg/Kg	10	6/20/2016 7:28:16 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	10	6/20/2016 7:28:16 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.71	3.5		mg/Kg	1	6/24/2016 4:46:45 PM	R35158
Surr: BFB	99.3	0	80-120		%Rec	1	6/24/2016 4:46:45 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.35	0.0011	0.067		mg/Kg	2	6/24/2016 1:10:59 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	23	49		mg/Kg	20	6/30/2016 10:29:56 AM	26038
Arsenic	ND	14	49		mg/Kg	20	6/27/2016 2:53:20 PM	26038
Barium	510	0.96	2.0		mg/Kg	20	6/27/2016 2:53:20 PM	26038
Beryllium	0.41	0.091	3.0	J	mg/Kg	20	6/27/2016 2:53:20 PM	26038
Cadmium	ND	1.3	2.0		mg/Kg	20	6/27/2016 2:53:20 PM	26038
Chromium	4.5	2.5	5.9	J	mg/Kg	20	6/27/2016 2:53:20 PM	26038
Cobalt	3.5	0.75	5.9	J	mg/Kg	20	6/27/2016 2:53:20 PM	26038
Lead	8.8	3.4	4.9		mg/Kg	20	6/27/2016 2:53:20 PM	26038
Nickel	5.7	2.3	9.9	J	mg/Kg	20	6/27/2016 2:53:20 PM	26038
Selenium	ND	22	49		mg/Kg	20	6/27/2016 2:53:20 PM	26038
Silver	ND	0.63	4.9		mg/Kg	20	6/27/2016 2:53:20 PM	26038
Vanadium	14	0.69	49	J	mg/Kg	20	6/27/2016 2:53:20 PM	26038
Zinc	14	11	49	J	mg/Kg	20	6/27/2016 2:53:20 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	3.4	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Acenaphthylene	ND	3.2	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Aniline	ND	3.7	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Anthracene	ND	2.6	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Azobenzene	ND	4.8	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benz(a)anthracene	ND	3.4	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benzo(a)pyrene	ND	3.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benzo(b)fluoranthene	ND	3.6	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benzo(g,h,i)perylene	ND	3.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benzo(k)fluoranthene	ND	3.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benzoic acid	ND	3.3	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Benzyl alcohol	ND	3.1	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Bis(2-chloroethoxy)methane	ND	4.3	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Bis(2-chloroethyl)ether	ND	2.9	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--5 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:15:00 PM

Lab ID: 1606870-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	3.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Bis(2-ethylhexyl)phthalate	ND	3.2	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4-Bromophenyl phenyl ether	ND	3.8	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Butyl benzyl phthalate	ND	3.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Carbazole	ND	2.7	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4-Chloro-3-methylphenol	ND	4.7	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4-Chloroaniline	ND	4.3	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2-Chloronaphthalene	ND	3.1	9.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2-Chlorophenol	ND	3.1	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4-Chlorophenyl phenyl ether	ND	4.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Chrysene	ND	3.4	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Di-n-butyl phthalate	ND	3.0	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Di-n-octyl phthalate	ND	3.4	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Dibenz(a,h)anthracene	ND	3.2	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Dibenzofuran	ND	4.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
1,2-Dichlorobenzene	ND	3.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
1,3-Dichlorobenzene	ND	3.1	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
1,4-Dichlorobenzene	ND	3.3	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
3,3'-Dichlorobenzidine	ND	2.9	9.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Diethyl phthalate	ND	4.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Dimethyl phthalate	ND	3.9	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,4-Dichlorophenol	ND	3.7	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,4-Dimethylphenol	ND	4.3	12	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4,6-Dinitro-2-methylphenol	ND	2.4	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,4-Dinitrophenol	ND	2.6	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,4-Dinitrotoluene	ND	3.5	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,6-Dinitrotoluene	ND	4.2	20	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Fluoranthene	ND	2.3	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Fluorene	ND	3.6	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Hexachlorobenzene	ND	3.1	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Hexachlorobutadiene	ND	4.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Hexachlorocyclopentadiene	ND	4.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Hexachloroethane	ND	3.4	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Indeno(1,2,3-cd)pyrene	ND	3.1	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
1-Methylnaphthalene	ND	4.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2-Methylnaphthalene	ND	4.7	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2-Methylphenol	ND	3.3	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
3+4-Methylphenol	ND	2.9	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
N-Nitrosodi-n-propylamine	ND	3.8	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--5 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:15:00 PM

Lab ID: 1606870-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	3.9	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Naphthalene	ND	3.8	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2-Nitroaniline	ND	4.3	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
3-Nitroaniline	ND	3.5	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4-Nitroaniline	ND	2.8	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Nitrobenzene	ND	4.1	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2-Nitrophenol	ND	3.9	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
4-Nitrophenol	ND	3.0	9.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Pentachlorophenol	ND	2.5	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Phenanthrene	ND	2.7	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Phenol	ND	3.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Pyrene	ND	3.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Pyridine	ND	3.1	16	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
1,2,4-Trichlorobenzene	ND	4.3	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,4,5-Trichlorophenol	ND	4.0	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
2,4,6-Trichlorophenol	ND	3.3	7.9	D	mg/Kg	4	6/22/2016 5:10:53 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	4	6/22/2016 5:10:53 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	4	6/22/2016 5:10:53 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	4	6/22/2016 5:10:53 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	4	6/22/2016 5:10:53 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	4	6/22/2016 5:10:53 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	4	6/22/2016 5:10:53 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Toluene	1.34	0.250	2.07	J	µg/Kg	1	6/24/2016 5:07:00 PM	26053
Ethylbenzene	ND	0.278	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.347	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2,4-Trimethylbenzene	0.630	0.350	2.07	J	µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,3,5-Trimethylbenzene	ND	0.341	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2-Dichloroethane (EDC)	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2-Dibromoethane (EDB)	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Naphthalene	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1-Methylnaphthalene	ND	0.235	4.13		µg/Kg	1	6/24/2016 5:07:00 PM	26053
2-Methylnaphthalene	ND	0.544	4.13		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Acetone	16.8	0.611	10.3		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Bromobenzene	ND	0.210	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Bromodichloromethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Bromoform	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Bromomethane	ND	0.372	3.10		µg/Kg	1	6/24/2016 5:07:00 PM	26053

Refer to the QC Summary report and 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

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--5 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:15:00 PM

Lab ID: 1606870-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	1.90	0.744	10.3	J	µg/Kg	1	6/24/2016 5:07:00 PM	26053
Carbon disulfide	ND	0.764	10.3		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Carbon tetrachloride	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Chlorobenzene	ND	0.237	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Chloroethane	ND	0.381	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Chloroform	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Chloromethane	ND	0.523	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
2-Chlorotoluene	ND	0.351	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
4-Chlorotoluene	ND	0.343	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
cis-1,2-DCE	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
cis-1,3-Dichloropropene	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.220	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Dibromochloromethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Dibromomethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2-Dichlorobenzene	ND	0.301	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,3-Dichlorobenzene	ND	0.381	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,4-Dichlorobenzene	ND	0.387	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Dichlorodifluoromethane	ND	1.21	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1-Dichloroethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1-Dichloroethene	ND	0.338	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2-Dichloropropane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,3-Dichloropropane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
2,2-Dichloropropane	ND	0.261	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1-Dichloropropene	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Hexachlorobutadiene	ND	0.471	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
2-Hexanone	ND	0.514	10.3		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Isopropylbenzene	ND	0.260	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
4-Isopropyltoluene	ND	0.387	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
4-Methyl-2-pentanone	ND	4.13	10.3		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Methylene chloride	ND	2.07	3.10		µg/Kg	1	6/24/2016 5:07:00 PM	26053
n-Butylbenzene	ND	0.503	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
n-Propylbenzene	ND	0.370	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
sec-Butylbenzene	ND	0.367	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Styrene	ND	0.264	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
tert-Butylbenzene	ND	0.302	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Tetrachloroethene (PCE)	ND	0.271	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
trans-1,2-DCE	ND	0.209	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--5 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:15:00 PM

Lab ID: 1606870-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.250	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.500	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.626	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1,1-Trichloroethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,1,2-Trichloroethane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Trichloroethene (TCE)	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Trichlorofluoromethane	ND	0.260	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
1,2,3-Trichloropropane	ND	2.07	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Vinyl chloride	ND	0.543	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Xylenes, Total	ND	0.823	2.07		µg/Kg	1	6/24/2016 5:07:00 PM	26053
Surr: 1,2-Dichloroethane-d4	89.6	0	70-130		%Rec	1	6/24/2016 5:07:00 PM	26053
Surr: 4-Bromofluorobenzene	122	0	70-130		%Rec	1	6/24/2016 5:07:00 PM	26053
Surr: Dibromofluoromethane	79.4	0	70-130		%Rec	1	6/24/2016 5:07:00 PM	26053
Surr: Toluene-d8	105	0	70-130		%Rec	1	6/24/2016 5:07:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--6 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:30:00 PM

Lab ID: 1606870-006

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	1100	18	95		mg/Kg	10	6/20/2016 2:22:32 PM	25888
Motor Oil Range Organics (MRO)	1200	480	480		mg/Kg	10	6/20/2016 2:22:32 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	10	6/20/2016 2:22:32 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.69	3.3		mg/Kg	1	6/24/2016 5:10:20 PM	R35158
Surr: BFB	102	0	80-120		%Rec	1	6/24/2016 5:10:20 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.40	0.0011	0.064		mg/Kg	2	6/24/2016 1:05:56 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Arsenic	2.2	0.73	2.5	J	mg/Kg	1	6/27/2016 1:25:40 PM	26038
Barium	820	0.24	0.50		mg/Kg	5	6/27/2016 2:49:45 PM	26038
Beryllium	0.53	0.0046	0.15		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Cadmium	ND	0.063	0.099		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Chromium	7.8	0.12	0.30		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Cobalt	3.2	0.038	0.30		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Lead	6.1	0.17	0.25		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Nickel	7.4	0.11	0.50		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Vanadium	19	0.035	2.5		mg/Kg	1	6/27/2016 1:25:40 PM	26038
Zinc	18	0.57	2.5		mg/Kg	1	6/27/2016 1:25:40 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.34	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Acenaphthylene	ND	0.32	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Aniline	ND	0.37	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Anthracene	ND	0.26	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Azobenzene	ND	0.48	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benz(a)anthracene	ND	0.34	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benzo(a)pyrene	ND	0.30	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benzo(b)fluoranthene	ND	0.36	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benzo(g,h,i)perylene	ND	0.35	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benzo(k)fluoranthene	ND	0.35	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benzoic acid	ND	0.33	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Benzyl alcohol	ND	0.31	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Bis(2-chloroethoxy)methane	ND	0.43	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Bis(2-chloroethyl)ether	ND	0.29	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938

Refer to the QC Summary report and 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: T-714--6 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:30:00 PM

Lab ID: 1606870-006

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.35	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.32	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4-Bromophenyl phenyl ether	ND	0.38	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Butyl benzyl phthalate	ND	0.35	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Carbazole	ND	0.27	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4-Chloro-3-methylphenol	ND	0.47	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4-Chloroaniline	ND	0.43	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2-Chloronaphthalene	ND	0.31	0.99	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2-Chlorophenol	ND	0.31	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4-Chlorophenyl phenyl ether	ND	0.45	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Chrysene	ND	0.34	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Di-n-butyl phthalate	ND	0.30	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Di-n-octyl phthalate	ND	0.34	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Dibenz(a,h)anthracene	ND	0.32	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Dibenzofuran	ND	0.40	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
1,2-Dichlorobenzene	ND	0.30	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
1,3-Dichlorobenzene	ND	0.31	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
1,4-Dichlorobenzene	ND	0.33	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
3,3'-Dichlorobenzidine	ND	0.29	0.99	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Diethyl phthalate	ND	0.40	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Dimethyl phthalate	ND	0.39	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,4-Dichlorophenol	ND	0.37	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,4-Dimethylphenol	ND	0.43	1.2	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.24	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,4-Dinitrophenol	ND	0.26	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,4-Dinitrotoluene	ND	0.35	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,6-Dinitrotoluene	ND	0.42	2.0	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Fluoranthene	ND	0.23	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Fluorene	ND	0.36	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Hexachlorobenzene	ND	0.31	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Hexachlorobutadiene	ND	0.45	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Hexachlorocyclopentadiene	ND	0.45	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Hexachloroethane	ND	0.34	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.31	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
1-Methylnaphthalene	ND	0.40	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2-Methylnaphthalene	ND	0.47	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2-Methylphenol	ND	0.33	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
3+4-Methylphenol	ND	0.29	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
N-Nitrosodi-n-propylamine	ND	0.38	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--6 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:30:00 PM

Lab ID: 1606870-006

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.39	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Naphthalene	ND	0.38	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2-Nitroaniline	ND	0.43	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
3-Nitroaniline	ND	0.35	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4-Nitroaniline	ND	0.28	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Nitrobenzene	ND	0.41	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2-Nitrophenol	ND	0.39	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
4-Nitrophenol	ND	0.30	0.99	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Pentachlorophenol	ND	0.25	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Phenanthrene	ND	0.27	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Phenol	ND	0.30	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Pyrene	ND	0.30	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Pyridine	ND	0.31	1.6	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
1,2,4-Trichlorobenzene	ND	0.43	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,4,5-Trichlorophenol	ND	0.40	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
2,4,6-Trichlorophenol	ND	0.33	0.79	D	mg/Kg	2	6/22/2016 5:39:17 PM	25938
Surr: 2-Fluorophenol	65.9	0	28.3-102	D	%Rec	2	6/22/2016 5:39:17 PM	25938
Surr: Phenol-d5	69.7	0	35.7-103	D	%Rec	2	6/22/2016 5:39:17 PM	25938
Surr: 2,4,6-Tribromophenol	64.4	0	35.2-108	D	%Rec	2	6/22/2016 5:39:17 PM	25938
Surr: Nitrobenzene-d5	74.3		24-118	D	%Rec	2	6/22/2016 5:39:17 PM	25938
Surr: 2-Fluorobiphenyl	78.3		35.4-111	D	%Rec	2	6/22/2016 5:39:17 PM	25938
Surr: 4-Terphenyl-d14	60.2		15-91.7	D	%Rec	2	6/22/2016 5:39:17 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Toluene	0.523	0.287	2.38	J	µg/Kg	1	6/24/2016 5:33:00 PM	26053
Ethylbenzene	ND	0.319	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.399	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2,4-Trimethylbenzene	ND	0.403	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,3,5-Trimethylbenzene	ND	0.392	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2-Dichloroethane (EDC)	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2-Dibromoethane (EDB)	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Naphthalene	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1-Methylnaphthalene	3.78	0.270	4.75	J	µg/Kg	1	6/24/2016 5:33:00 PM	26053
2-Methylnaphthalene	1.45	0.626	4.75	J	µg/Kg	1	6/24/2016 5:33:00 PM	26053
Acetone	10.6	0.703	11.9	J	µg/Kg	1	6/24/2016 5:33:00 PM	26053
Bromobenzene	ND	0.242	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Bromodichloromethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Bromoform	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Bromomethane	ND	0.428	3.57		µg/Kg	1	6/24/2016 5:33:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--6 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:30:00 PM

Lab ID: 1606870-006

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.857	11.9		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Carbon disulfide	ND	0.879	11.9		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Carbon tetrachloride	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Chlorobenzene	ND	0.273	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Chloroethane	ND	0.439	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Chloroform	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Chloromethane	ND	0.602	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
2-Chlorotoluene	ND	0.404	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
4-Chlorotoluene	ND	0.395	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
cis-1,2-DCE	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
cis-1,3-Dichloropropene	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.253	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Dibromochloromethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Dibromomethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2-Dichlorobenzene	ND	0.346	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,3-Dichlorobenzene	ND	0.439	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,4-Dichlorobenzene	ND	0.445	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Dichlorodifluoromethane	ND	1.39	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1-Dichloroethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1-Dichloroethene	ND	0.389	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2-Dichloropropane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,3-Dichloropropane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
2,2-Dichloropropane	ND	0.300	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1-Dichloropropene	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Hexachlorobutadiene	ND	0.542	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
2-Hexanone	ND	0.592	11.9		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Isopropylbenzene	ND	0.299	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
4-Isopropyltoluene	ND	0.446	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
4-Methyl-2-pentanone	ND	4.75	11.9		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Methylene chloride	ND	2.38	3.57		µg/Kg	1	6/24/2016 5:33:00 PM	26053
n-Butylbenzene	ND	0.579	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
n-Propylbenzene	ND	0.426	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
sec-Butylbenzene	ND	0.422	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Styrene	ND	0.304	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
tert-Butylbenzene	ND	0.347	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Tetrachloroethene (PCE)	ND	0.312	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
trans-1,2-DCE	ND	0.240	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--6 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:30:00 PM

Lab ID: 1606870-006

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.288	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.575	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.721	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1,1-Trichloroethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,1,2-Trichloroethane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Trichloroethene (TCE)	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Trichlorofluoromethane	ND	0.299	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
1,2,3-Trichloropropane	ND	2.38	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Vinyl chloride	ND	0.625	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Xylenes, Total	ND	0.947	2.38		µg/Kg	1	6/24/2016 5:33:00 PM	26053
Surr: 1,2-Dichloroethane-d4	101	0	70-130		%Rec	1	6/24/2016 5:33:00 PM	26053
Surr: 4-Bromofluorobenzene	118	0	70-130		%Rec	1	6/24/2016 5:33:00 PM	26053
Surr: Dibromofluoromethane	80.8	0	70-130		%Rec	1	6/24/2016 5:33:00 PM	26053
Surr: Toluene-d8	116	0	70-130		%Rec	1	6/24/2016 5:33:00 PM	26053

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--7 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:45:00 PM

Lab ID: 1606870-007

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	2500	18	96		mg/Kg	10	6/20/2016 4:11:52 PM	25888
Motor Oil Range Organics (MRO)	2500	480	480		mg/Kg	10	6/20/2016 4:11:52 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	10	6/20/2016 4:11:52 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.65	3.2		mg/Kg	1	6/24/2016 5:34:05 PM	R35158
Surr: BFB	101	0	80-120		%Rec	1	6/24/2016 5:34:05 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.036	0.00057	0.033		mg/Kg	1	6/24/2016 12:53:21 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Arsenic	1.7	0.72	2.5	J	mg/Kg	1	6/27/2016 1:29:39 PM	26038
Barium	590	0.24	0.49		mg/Kg	5	6/27/2016 2:51:34 PM	26038
Beryllium	0.53	0.0045	0.15		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Cadmium	ND	0.062	0.098		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Chromium	5.5	0.12	0.29		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Cobalt	2.8	0.037	0.29		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Lead	2.9	0.17	0.25		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Nickel	5.0	0.11	0.49		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Silver	ND	0.031	0.25		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Vanadium	13	0.034	2.5		mg/Kg	1	6/27/2016 1:29:39 PM	26038
Zinc	9.6	0.56	2.5		mg/Kg	1	6/27/2016 1:29:39 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.68	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Acenaphthylene	ND	0.65	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Aniline	ND	0.75	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Anthracene	ND	0.53	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Azobenzene	ND	0.97	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benz(a)anthracene	ND	0.68	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benzo(a)pyrene	ND	0.60	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benzo(b)fluoranthene	ND	0.72	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benzo(g,h,i)perylene	ND	0.70	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benzo(k)fluoranthene	ND	0.70	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benzoic acid	ND	0.66	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Benzyl alcohol	ND	0.62	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Bis(2-chloroethoxy)methane	ND	0.86	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Bis(2-chloroethyl)ether	ND	0.58	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938

Refer to the QC Summary report and 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: T-714--7 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:45:00 PM

Lab ID: 1606870-007

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.71	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.65	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4-Bromophenyl phenyl ether	ND	0.76	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Butyl benzyl phthalate	ND	0.70	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Carbazole	ND	0.54	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4-Chloro-3-methylphenol	ND	0.95	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4-Chloroaniline	ND	0.86	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2-Chloronaphthalene	ND	0.63	2.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2-Chlorophenol	ND	0.63	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4-Chlorophenyl phenyl ether	ND	0.91	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Chrysene	ND	0.68	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Di-n-butyl phthalate	ND	0.59	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Di-n-octyl phthalate	ND	0.68	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Dibenz(a,h)anthracene	ND	0.64	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Dibenzofuran	ND	0.80	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
1,2-Dichlorobenzene	ND	0.61	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
1,3-Dichlorobenzene	ND	0.61	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
1,4-Dichlorobenzene	ND	0.67	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
3,3'-Dichlorobenzidine	ND	0.58	2.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Diethyl phthalate	ND	0.81	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Dimethyl phthalate	ND	0.78	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,4-Dichlorophenol	ND	0.74	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,4-Dimethylphenol	ND	0.86	2.4	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.48	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,4-Dinitrophenol	ND	0.53	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,4-Dinitrotoluene	ND	0.71	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,6-Dinitrotoluene	ND	0.84	4.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Fluoranthene	ND	0.46	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Fluorene	ND	0.73	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Hexachlorobenzene	ND	0.63	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Hexachlorobutadiene	ND	0.90	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Hexachlorocyclopentadiene	ND	0.91	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Hexachloroethane	ND	0.68	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.62	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
1-Methylnaphthalene	ND	0.80	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2-Methylnaphthalene	ND	0.94	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2-Methylphenol	ND	0.66	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
3+4-Methylphenol	ND	0.58	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
N-Nitrosodi-n-propylamine	ND	0.76	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--7 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:45:00 PM

Lab ID: 1606870-007

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.78	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Naphthalene	ND	0.76	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2-Nitroaniline	ND	0.86	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
3-Nitroaniline	ND	0.70	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4-Nitroaniline	ND	0.56	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Nitrobenzene	ND	0.82	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2-Nitrophenol	ND	0.79	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
4-Nitrophenol	ND	0.61	2.0	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Pentachlorophenol	ND	0.51	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Phenanthrene	ND	0.54	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Phenol	ND	0.60	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Pyrene	ND	0.60	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Pyridine	ND	0.63	3.2	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
1,2,4-Trichlorobenzene	ND	0.86	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,4,5-Trichlorophenol	ND	0.80	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
2,4,6-Trichlorophenol	ND	0.66	1.6	D	mg/Kg	4	6/22/2016 6:07:48 PM	25938
Surr: 2-Fluorophenol	47.6	0	28.3-102	D	%Rec	4	6/22/2016 6:07:48 PM	25938
Surr: Phenol-d5	48.6	0	35.7-103	D	%Rec	4	6/22/2016 6:07:48 PM	25938
Surr: 2,4,6-Tribromophenol	55.0	0	35.2-108	D	%Rec	4	6/22/2016 6:07:48 PM	25938
Surr: Nitrobenzene-d5	63.6		24-118	D	%Rec	4	6/22/2016 6:07:48 PM	25938
Surr: 2-Fluorobiphenyl	68.3		35.4-111	D	%Rec	4	6/22/2016 6:07:48 PM	25938
Surr: 4-Terphenyl-d14	66.6		15-91.7	D	%Rec	4	6/22/2016 6:07:48 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Toluene	0.402	0.194	1.61	J	µg/Kg	1	6/24/2016 5:58:00 PM	26053
Ethylbenzene	ND	0.216	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.270	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2,4-Trimethylbenzene	2.59	0.272	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,3,5-Trimethylbenzene	0.586	0.265	1.61	J	µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Naphthalene	6.01	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1-Methylnaphthalene	26.7	0.183	3.21		µg/Kg	1	6/24/2016 5:58:00 PM	26053
2-Methylnaphthalene	25.3	0.423	3.21		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Acetone	12.9	0.475	8.03		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Bromobenzene	ND	0.163	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Bromodichloromethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Bromoform	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Bromomethane	ND	0.289	2.41		µg/Kg	1	6/24/2016 5:58:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--7 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 2:45:00 PM

Lab ID: 1606870-007

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	1.90	0.579	8.03	J	µg/Kg	1	6/24/2016 5:58:00 PM	26053
Carbon disulfide	ND	0.594	8.03		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Carbon tetrachloride	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Chlorobenzene	ND	0.184	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Chloroethane	ND	0.297	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Chloroform	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Chloromethane	ND	0.407	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
2-Chlorotoluene	ND	0.273	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
4-Chlorotoluene	ND	0.267	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
cis-1,2-DCE	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
cis-1,3-Dichloropropene	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.171	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Dibromochloromethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Dibromomethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2-Dichlorobenzene	ND	0.234	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,3-Dichlorobenzene	ND	0.297	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,4-Dichlorobenzene	ND	0.301	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Dichlorodifluoromethane	ND	0.938	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1-Dichloroethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1-Dichloroethene	ND	0.263	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2-Dichloropropane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,3-Dichloropropane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
2,2-Dichloropropane	ND	0.203	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1-Dichloropropene	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Hexachlorobutadiene	ND	0.366	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
2-Hexanone	ND	0.400	8.03		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Isopropylbenzene	ND	0.202	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
4-Isopropyltoluene	0.386	0.301	1.61	J	µg/Kg	1	6/24/2016 5:58:00 PM	26053
4-Methyl-2-pentanone	ND	3.21	8.03		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Methylene chloride	ND	1.61	2.41		µg/Kg	1	6/24/2016 5:58:00 PM	26053
n-Butylbenzene	0.683	0.391	1.61	J	µg/Kg	1	6/24/2016 5:58:00 PM	26053
n-Propylbenzene	ND	0.288	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
sec-Butylbenzene	ND	0.285	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Styrene	ND	0.205	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
tert-Butylbenzene	ND	0.235	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Tetrachloroethene (PCE)	ND	0.211	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
trans-1,2-DCE	ND	0.162	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup**Client Sample ID:** T-714--7 (0-6")**Project:** Tank 714 Confirmation Sampling**Collection Date:** 6/14/2016 2:45:00 PM**Lab ID:** 1606870-007**Matrix:** SOIL**Received Date:** 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.194	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.389	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.487	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1,1-Trichloroethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,1,2-Trichloroethane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Trichloroethene (TCE)	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Trichlorofluoromethane	ND	0.202	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
1,2,3-Trichloropropane	ND	1.61	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Vinyl chloride	ND	0.423	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Xylenes, Total	ND	0.640	1.61		µg/Kg	1	6/24/2016 5:58:00 PM	26053
Surr: 1,2-Dichloroethane-d4	103	0	70-130		%Rec	1	6/24/2016 5:58:00 PM	26053
Surr: 4-Bromofluorobenzene	136	0	70-130	S	%Rec	1	6/24/2016 5:58:00 PM	26053
Surr: Dibromofluoromethane	79.9	0	70-130		%Rec	1	6/24/2016 5:58:00 PM	26053
Surr: Toluene-d8	111	0	70-130		%Rec	1	6/24/2016 5:58:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--8 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:00:00 PM

Lab ID: 1606870-008

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	1600	18	96		mg/Kg	10	6/20/2016 5:17:32 PM	25888
Motor Oil Range Organics (MRO)	3000	480	480		mg/Kg	10	6/20/2016 5:17:32 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	10	6/20/2016 5:17:32 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	0.89	0.73	3.5	J	mg/Kg	1	6/25/2016 6:29:35 PM	R35158
Surr: BFB	109	0	80-120		%Rec	1	6/25/2016 6:29:35 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.0046	0.00057	0.033	J	mg/Kg	1	6/24/2016 12:55:06 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Arsenic	ND	1.4	4.9		mg/Kg	2	6/27/2016 1:35:34 PM	26038
Barium	310	0.096	0.20		mg/Kg	2	6/27/2016 1:35:34 PM	26038
Beryllium	0.49	0.0046	0.15		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Cadmium	ND	0.063	0.099		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Chromium	4.2	0.12	0.30		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Cobalt	2.3	0.038	0.30		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Lead	5.2	0.17	0.25		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Nickel	4.0	0.11	0.49		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Silver	ND	0.031	0.25		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Vanadium	10	0.034	2.5		mg/Kg	1	6/27/2016 1:33:37 PM	26038
Zinc	9.0	0.56	2.5		mg/Kg	1	6/27/2016 1:33:37 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	8.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Acenaphthylene	ND	8.1	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Aniline	ND	9.4	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Anthracene	ND	6.6	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Azobenzene	ND	12	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benz(a)anthracene	ND	8.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benzo(a)pyrene	ND	7.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benzo(b)fluoranthene	ND	8.9	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benzo(g,h,i)perylene	ND	8.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benzo(k)fluoranthene	ND	8.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benzoic acid	ND	8.2	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Benzyl alcohol	ND	7.8	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Bis(2-chloroethoxy)methane	ND	11	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Bis(2-chloroethyl)ether	ND	7.3	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938

Refer to the QC Summary report and 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: T-714--8 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:00:00 PM

Lab ID: 1606870-008

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	8.8	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Bis(2-ethylhexyl)phthalate	ND	8.1	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4-Bromophenyl phenyl ether	ND	9.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Butyl benzyl phthalate	ND	8.8	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Carbazole	ND	6.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4-Chloro-3-methylphenol	ND	12	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4-Chloroaniline	ND	11	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2-Chloronaphthalene	ND	7.8	25	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2-Chlorophenol	ND	7.8	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4-Chlorophenyl phenyl ether	ND	11	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Chrysene	ND	8.4	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Di-n-butyl phthalate	ND	7.4	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Di-n-octyl phthalate	ND	8.4	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Dibenz(a,h)anthracene	ND	8.0	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Dibenzofuran	ND	10	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
1,2-Dichlorobenzene	ND	7.6	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
1,3-Dichlorobenzene	ND	7.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
1,4-Dichlorobenzene	ND	8.4	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
3,3'-Dichlorobenzidine	ND	7.3	25	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Diethyl phthalate	ND	10	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Dimethyl phthalate	ND	9.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,4-Dichlorophenol	ND	9.2	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,4-Dimethylphenol	ND	11	30	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4,6-Dinitro-2-methylphenol	ND	6.0	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,4-Dinitrophenol	ND	6.6	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,4-Dinitrotoluene	ND	8.8	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,6-Dinitrotoluene	ND	10	50	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Fluoranthene	ND	5.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Fluorene	ND	9.1	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Hexachlorobenzene	ND	7.8	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Hexachlorobutadiene	ND	11	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Hexachlorocyclopentadiene	ND	11	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Hexachloroethane	ND	8.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Indeno(1,2,3-cd)pyrene	ND	7.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
1-Methylnaphthalene	ND	9.9	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2-Methylnaphthalene	ND	12	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2-Methylphenol	ND	8.3	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
3+4-Methylphenol	ND	7.2	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
N-Nitrosodi-n-propylamine	ND	9.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--8 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:00:00 PM

Lab ID: 1606870-008

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	9.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Naphthalene	ND	9.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2-Nitroaniline	ND	11	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
3-Nitroaniline	ND	8.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4-Nitroaniline	ND	7.0	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Nitrobenzene	ND	10	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2-Nitrophenol	ND	9.8	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
4-Nitrophenol	ND	7.5	25	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Pentachlorophenol	ND	6.4	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Phenanthrene	ND	6.7	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Phenol	ND	7.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Pyrene	ND	7.5	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Pyridine	ND	7.8	40	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
1,2,4-Trichlorobenzene	ND	11	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,4,5-Trichlorophenol	ND	9.9	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
2,4,6-Trichlorophenol	ND	8.2	20	D	mg/Kg	10	6/22/2016 6:36:14 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	10	6/22/2016 6:36:14 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	10	6/22/2016 6:36:14 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	10	6/22/2016 6:36:14 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	10	6/22/2016 6:36:14 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	10	6/22/2016 6:36:14 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	10	6/22/2016 6:36:14 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Toluene	0.276	0.196	1.62	J	µg/Kg	1	6/24/2016 6:23:00 PM	26053
Ethylbenzene	ND	0.218	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.272	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2,4-Trimethylbenzene	0.430	0.275	1.62	J	µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,3,5-Trimethylbenzene	ND	0.268	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Naphthalene	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1-Methylnaphthalene	1.83	0.184	3.24	J	µg/Kg	1	6/24/2016 6:23:00 PM	26053
2-Methylnaphthalene	1.83	0.427	3.24	J	µg/Kg	1	6/24/2016 6:23:00 PM	26053
Acetone	98.2	0.480	8.11		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Bromobenzene	ND	0.165	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Bromodichloromethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Bromoform	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Bromomethane	ND	0.292	2.43		µg/Kg	1	6/24/2016 6:23:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1606870

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--8 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:00:00 PM

Lab ID: 1606870-008

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	13.3	0.585	8.11		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Carbon disulfide	ND	0.600	8.11		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Carbon tetrachloride	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Chlorobenzene	ND	0.186	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Chloroethane	ND	0.299	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Chloroform	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Chloromethane	ND	0.411	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
2-Chlorotoluene	ND	0.276	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
4-Chlorotoluene	ND	0.270	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
cis-1,2-DCE	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
cis-1,3-Dichloropropene	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.173	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Dibromochloromethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Dibromomethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2-Dichlorobenzene	ND	0.236	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,3-Dichlorobenzene	ND	0.300	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,4-Dichlorobenzene	ND	0.304	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Dichlorodifluoromethane	ND	0.947	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1-Dichloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1-Dichloroethene	ND	0.266	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2-Dichloropropane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,3-Dichloropropane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
2,2-Dichloropropane	ND	0.205	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1-Dichloropropene	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Hexachlorobutadiene	ND	0.370	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
2-Hexanone	ND	0.404	8.11		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Isopropylbenzene	ND	0.204	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
4-Isopropyltoluene	ND	0.304	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
4-Methyl-2-pentanone	ND	3.24	8.11		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Methylene chloride	ND	1.62	2.43		µg/Kg	1	6/24/2016 6:23:00 PM	26053
n-Butylbenzene	ND	0.395	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
n-Propylbenzene	ND	0.290	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
sec-Butylbenzene	ND	0.288	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Styrene	ND	0.207	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
tert-Butylbenzene	ND	0.237	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Tetrachloroethene (PCE)	ND	0.213	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
trans-1,2-DCE	ND	0.164	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053

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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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--8 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:00:00 PM

Lab ID: 1606870-008

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.196	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.392	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.492	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1,1-Trichloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,1,2-Trichloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Trichloroethene (TCE)	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Trichlorofluoromethane	ND	0.204	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
1,2,3-Trichloropropane	ND	1.62	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Vinyl chloride	ND	0.427	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Xylenes, Total	ND	0.646	1.62		µg/Kg	1	6/24/2016 6:23:00 PM	26053
Surr: 1,2-Dichloroethane-d4	121	0	70-130		%Rec	1	6/24/2016 6:23:00 PM	26053
Surr: 4-Bromofluorobenzene	159	0	70-130	S	%Rec	1	6/24/2016 6:23:00 PM	26053
Surr: Dibromofluoromethane	92.0	0	70-130		%Rec	1	6/24/2016 6:23:00 PM	26053
Surr: Toluene-d8	132	0	70-130	S	%Rec	1	6/24/2016 6:23:00 PM	26053

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--9 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:15:00 PM

Lab ID: 1606870-009

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	1900	18	97		mg/Kg	10	6/20/2016 6:22:58 PM	25888
Motor Oil Range Organics (MRO)	2100	490	490		mg/Kg	10	6/20/2016 6:22:58 PM	25888
Surr: DNOP	0	0	70-130	S	%Rec	10	6/20/2016 6:22:58 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.71	3.4		mg/Kg	1	6/24/2016 6:21:18 PM	R35158
Surr: BFB	98.1	0	80-120		%Rec	1	6/24/2016 6:21:18 PM	R35158
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.075	0.00056	0.032		mg/Kg	1	6/24/2016 1:00:33 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Arsenic	ND	1.5	5.0		mg/Kg	2	6/27/2016 1:39:08 PM	26038
Barium	390	0.097	0.20		mg/Kg	2	6/27/2016 1:39:08 PM	26038
Beryllium	0.46	0.0046	0.15		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Cadmium	ND	0.064	0.10		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Chromium	7.7	0.13	0.30		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Cobalt	2.8	0.038	0.30		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Lead	7.4	0.18	0.25		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Nickel	4.9	0.11	0.50		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Vanadium	14	0.035	2.5		mg/Kg	1	6/27/2016 1:37:21 PM	26038
Zinc	14	0.57	2.5		mg/Kg	1	6/27/2016 1:37:21 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	8.4	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Acenaphthylene	ND	8.0	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Aniline	ND	9.3	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Anthracene	ND	6.5	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Azobenzene	ND	12	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benz(a)anthracene	ND	8.5	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benzo(a)pyrene	ND	7.5	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benzo(b)fluoranthene	ND	8.9	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benzo(g,h,i)perylene	ND	8.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benzo(k)fluoranthene	ND	8.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benzoic acid	ND	8.2	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Benzyl alcohol	ND	7.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Bis(2-chloroethoxy)methane	ND	11	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Bis(2-chloroethyl)ether	ND	7.2	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--9 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:15:00 PM

Lab ID: 1606870-009

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	8.8	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Bis(2-ethylhexyl)phthalate	ND	8.0	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4-Bromophenyl phenyl ether	ND	9.4	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Butyl benzyl phthalate	ND	8.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Carbazole	ND	6.6	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4-Chloro-3-methylphenol	ND	12	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4-Chloroaniline	ND	11	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2-Chloronaphthalene	ND	7.7	25	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2-Chlorophenol	ND	7.8	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4-Chlorophenyl phenyl ether	ND	11	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Chrysene	ND	8.4	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Di-n-butyl phthalate	ND	7.4	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Di-n-octyl phthalate	ND	8.4	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Dibenz(a,h)anthracene	ND	8.0	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Dibenzofuran	ND	9.9	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
1,2-Dichlorobenzene	ND	7.5	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
1,3-Dichlorobenzene	ND	7.6	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
1,4-Dichlorobenzene	ND	8.3	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
3,3'-Dichlorobenzidine	ND	7.2	25	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Diethyl phthalate	ND	10	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Dimethyl phthalate	ND	9.6	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,4-Dichlorophenol	ND	9.2	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,4-Dimethylphenol	ND	11	30	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4,6-Dinitro-2-methylphenol	ND	6.0	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,4-Dinitrophenol	ND	6.5	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,4-Dinitrotoluene	ND	8.8	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,6-Dinitrotoluene	ND	10	49	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Fluoranthene	ND	5.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Fluorene	ND	9.0	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Hexachlorobenzene	ND	7.8	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Hexachlorobutadiene	ND	11	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Hexachlorocyclopentadiene	ND	11	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Hexachloroethane	ND	8.5	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Indeno(1,2,3-cd)pyrene	ND	7.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
1-Methylnaphthalene	ND	9.9	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2-Methylnaphthalene	ND	12	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2-Methylphenol	ND	8.2	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
3+4-Methylphenol	ND	7.1	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
N-Nitrosodi-n-propylamine	ND	9.5	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714--9 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:15:00 PM

Lab ID: 1606870-009

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	9.6	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Naphthalene	ND	9.4	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2-Nitroaniline	ND	11	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
3-Nitroaniline	ND	8.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4-Nitroaniline	ND	6.9	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Nitrobenzene	ND	10	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2-Nitrophenol	ND	9.8	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
4-Nitrophenol	ND	7.5	25	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Pentachlorophenol	ND	6.3	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Phenanthrene	ND	6.7	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Phenol	ND	7.4	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Pyrene	ND	7.4	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Pyridine	ND	7.8	39	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
1,2,4-Trichlorobenzene	ND	11	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,4,5-Trichlorophenol	ND	9.8	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
2,4,6-Trichlorophenol	ND	8.2	20	D	mg/Kg	10	6/22/2016 7:04:33 PM	25938
Surr: 2-Fluorophenol	0	0	28.3-102	SD	%Rec	10	6/22/2016 7:04:33 PM	25938
Surr: Phenol-d5	0	0	35.7-103	SD	%Rec	10	6/22/2016 7:04:33 PM	25938
Surr: 2,4,6-Tribromophenol	0	0	35.2-108	SD	%Rec	10	6/22/2016 7:04:33 PM	25938
Surr: Nitrobenzene-d5	0		24-118	SD	%Rec	10	6/22/2016 7:04:33 PM	25938
Surr: 2-Fluorobiphenyl	0		35.4-111	SD	%Rec	10	6/22/2016 7:04:33 PM	25938
Surr: 4-Terphenyl-d14	0		15-91.7	SD	%Rec	10	6/22/2016 7:04:33 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Toluene	0.667	0.248	2.05	J	µg/Kg	1	6/24/2016 7:13:00 PM	26053
Ethylbenzene	ND	0.276	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.345	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2,4-Trimethylbenzene	ND	0.348	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,3,5-Trimethylbenzene	ND	0.338	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2-Dichloroethane (EDC)	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2-Dibromoethane (EDB)	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Naphthalene	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1-Methylnaphthalene	5.80	0.233	4.10		µg/Kg	1	6/24/2016 7:13:00 PM	26053
2-Methylnaphthalene	5.64	0.540	4.10		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Acetone	91.0	0.607	10.3		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Bromobenzene	ND	0.209	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Bromodichloromethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Bromoform	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Bromomethane	ND	0.369	3.08		µg/Kg	1	6/24/2016 7:13:00 PM	26053

Refer to the QC Summary report and 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: T-714--9 (0-6")

Project: Tank 714 Confirmation Sampling

Collection Date: 6/14/2016 3:15:00 PM

Lab ID: 1606870-009

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	19.3	0.739	10.3		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Carbon disulfide	ND	0.758	10.3		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Carbon tetrachloride	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Chlorobenzene	ND	0.235	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Chloroethane	ND	0.379	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Chloroform	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Chloromethane	ND	0.520	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
2-Chlorotoluene	ND	0.349	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
4-Chlorotoluene	ND	0.341	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
cis-1,2-DCE	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
cis-1,3-Dichloropropene	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.218	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Dibromochloromethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Dibromomethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2-Dichlorobenzene	ND	0.299	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,3-Dichlorobenzene	ND	0.379	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,4-Dichlorobenzene	ND	0.384	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Dichlorodifluoromethane	ND	1.20	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1-Dichloroethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1-Dichloroethene	ND	0.336	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2-Dichloropropane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,3-Dichloropropane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
2,2-Dichloropropane	ND	0.259	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1-Dichloropropene	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Hexachlorobutadiene	ND	0.468	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
2-Hexanone	4.55	0.511	10.3	J	µg/Kg	1	6/24/2016 7:13:00 PM	26053
Isopropylbenzene	ND	0.258	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
4-Isopropyltoluene	ND	0.385	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
4-Methyl-2-pentanone	ND	4.10	10.3		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Methylene chloride	ND	2.05	3.08		µg/Kg	1	6/24/2016 7:13:00 PM	26053
n-Butylbenzene	ND	0.499	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
n-Propylbenzene	ND	0.367	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
sec-Butylbenzene	ND	0.364	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Styrene	ND	0.262	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
tert-Butylbenzene	ND	0.300	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Tetrachloroethene (PCE)	ND	0.269	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
trans-1,2-DCE	ND	0.207	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606870**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup**Client Sample ID:** T-714--9 (0-6")**Project:** Tank 714 Confirmation Sampling**Collection Date:** 6/14/2016 3:15:00 PM**Lab ID:** 1606870-009**Matrix:** SOIL**Received Date:** 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.248	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.496	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.622	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1,1-Trichloroethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,1,2-Trichloroethane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Trichloroethene (TCE)	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Trichlorofluoromethane	ND	0.258	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
1,2,3-Trichloropropane	ND	2.05	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Vinyl chloride	ND	0.539	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Xylenes, Total	ND	0.817	2.05		µg/Kg	1	6/24/2016 7:13:00 PM	26053
Surr: 1,2-Dichloroethane-d4	110	0	70-130		%Rec	1	6/24/2016 7:13:00 PM	26053
Surr: 4-Bromofluorobenzene	131	0	70-130	S	%Rec	1	6/24/2016 7:13:00 PM	26053
Surr: Dibromofluoromethane	87.4	0	70-130		%Rec	1	6/24/2016 7:13:00 PM	26053
Surr: Toluene-d8	116	0	70-130		%Rec	1	6/24/2016 7:13:00 PM	26053

Refer to the QC Summary report and 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

Anatek Labs, Inc.

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

Batch #: 160617020
Project Name: 1606870

Analytical Results Report

Sample Number	160617020-001	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-001C / T-714-1 (0-6)			Sampling Time	1:10 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.253	6/23/2016	MER	EPA 335.4	
%moisture	8.5	Percent		6/22/2016	MER	%moisture	

Sample Number	160617020-002	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-002C / T-714-2 (0-6)			Sampling Time	1:25 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.255	6/23/2016	MER	EPA 335.4	
%moisture	5.7	Percent		6/22/2016	MER	%moisture	

Sample Number	160617020-003	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-003C / T-714-3 (0-6)			Sampling Time	1:45 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.271	6/23/2016	MER	EPA 335.4	
%moisture	10.9	Percent		6/22/2016	MER	%moisture	

Sample Number	160617020-004	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-004C / T-714-4 (0-6)			Sampling Time	2:00 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.239	6/23/2016	MER	EPA 335.4	
%moisture	5.8	Percent		6/22/2016	MER	%moisture	

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

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

Batch #: 160617020
Project Name: 1606870

Analytical Results Report

Sample Number	160617020-005	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-005C / T-714-5 (0-6)			Sampling Time	2:15 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.226	6/23/2016	MER	EPA 335.4	
%moisture	5.5	Percent		6/22/2016	MER	%moisture	

Sample Number	160617020-006	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-006C / T-714-6 (0-6)			Sampling Time	2:30 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.237	6/23/2016	MER	EPA 335.4	
%moisture	5.9	Percent		6/22/2016	MER	%moisture	

Sample Number	160617020-007	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-007C / T-714-7 (0-6)			Sampling Time	2:45 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.225	6/23/2016	MER	EPA 335.4	
%moisture	10.1	Percent		6/22/2016	MER	%moisture	

Sample Number	160617020-008	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606870-008C / T-714-8 (0-6)			Sampling Time	3:00 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.243	6/23/2016	MER	EPA 335.4	
%moisture	11.9	Percent		6/22/2016	MER	%moisture	

Anatek Labs, Inc.

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

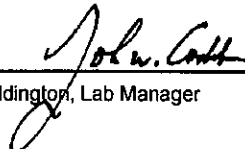
Batch #: 160617020
Project Name: 1606870

Analytical Results Report

Sample Number	160617020-009	Sampling Date	6/14/2016	Date/Time Received	6/17/2016 12:00 PM
Client Sample ID	1606870-009C / T-714-9 (0-6)			Sampling Time	3:15 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.257	6/23/2016	MER	EPA 335.4	
%moisture	7.7	Percent		6/22/2016	MER	%moisture	

Authorized Signature


John Coddington, Lab Manager

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

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

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

Batch #: 160617020
Project Name: 1606870

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.489	mg/kg	0.5	97.8	90-110	6/23/2016	6/23/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160617018-001	Cyanide	ND	12.4	mg/kg	12.8	96.9	70-130	6/23/2016	6/23/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	11.9	mg/kg	12.8	93.0	4.1	0-25	6/23/2016	6/23/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	0.5	6/23/2016	6/23/2016

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

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00189; ID:WA00189; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	MB-25888	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 25888			RunNo: 35005					
Prep Date:	6/16/2016	Analysis Date: 6/20/2016			SeqNo: 1082125		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.4	70	130			

Sample ID	LCS-25888		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 25888		RunNo: 35005					
Prep Date:	6/16/2016		Analysis Date: 6/20/2016		SeqNo: 1082126		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.2	62.6	124			
Surr: DNOP	4.5		5.000		90.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	5ML-RB		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: R35158		RunNo: 35158					
Prep Date:			Analysis Date: 6/24/2016		SeqNo: 1087655		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	970		1000		97.3	80	120			

Sample ID	1606870-009A MS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	T-714--9 (0-6")		Batch ID: R35158		RunNo: 35158					
Prep Date:			Analysis Date: 6/24/2016		SeqNo: 1087985		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.4	17.12	0	95.2	59.3	143			
Surr: BFB	740		684.9		109	80	120			

Sample ID	1606870-009A MSD		SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	T-714--9 (0-6")		Batch ID:	R35158		RunNo:	35158				
Prep Date:			Analysis Date:	6/24/2016		SeqNo:	1087986	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	16	3.4	17.12	0	91.8	59.3	143	3.64	20		
Surr: BFB	730		684.9		107	80	120	0	0		

Sample ID	2.5NG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: R35158		RunNo: 35158					
Prep Date:			Analysis Date: 6/24/2016		SeqNo: 1088007		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.4	80	120			
Surr: BFB	1100		1000		113	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	mb-26053	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	26053	RunNo:	35168					
Prep Date:	6/24/2016	Analysis Date:	6/24/2016	SeqNo:	1087841	Units:	µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.00								
Toluene	ND	2.00								
Ethylbenzene	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	2.00								
1,2,4-Trimethylbenzene	ND	2.00								
1,3,5-Trimethylbenzene	ND	2.00								
1,2-Dichloroethane (EDC)	ND	2.00								
1,2-Dibromoethane (EDB)	ND	2.00								
Naphthalene	ND	2.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	2.00								
Bromodichloromethane	ND	2.00								
Bromoform	ND	2.00								
Bromomethane	ND	3.00								
2-Butanone	ND	10.0								
Carbon disulfide	ND	10.0								
Carbon tetrachloride	ND	2.00								
Chlorobenzene	ND	2.00								
Chloroethane	ND	2.00								
Chloroform	ND	2.00								
Chloromethane	ND	2.00								
2-Chlorotoluene	ND	2.00								
4-Chlorotoluene	ND	2.00								
cis-1,2-DCE	ND	2.00								
cis-1,3-Dichloropropene	ND	2.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	2.00								
Dibromomethane	ND	2.00								
1,2-Dichlorobenzene	ND	2.00								
1,3-Dichlorobenzene	ND	2.00								
1,4-Dichlorobenzene	ND	2.00								
Dichlorodifluoromethane	ND	2.00								
1,1-Dichloroethane	ND	2.00								
1,1-Dichloroethene	ND	2.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	2.00								
2,2-Dichloropropane	ND	2.00								

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	mb-26053		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	26053		RunNo:	35168			
Prep Date:	6/24/2016		Analysis Date:	6/24/2016		SeqNo:	1087841	Units:	µg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	2.00								
Hexachlorobutadiene	ND	2.00								
2-Hexanone	ND	10.0								
Isopropylbenzene	ND	2.00								
4-Isopropyltoluene	ND	2.00								
4-Methyl-2-pentanone	ND	10.0								
Methylene chloride	ND	3.00								
n-Butylbenzene	ND	2.00								
n-Propylbenzene	ND	2.00								
sec-Butylbenzene	ND	2.00								
Styrene	ND	2.00								
tert-Butylbenzene	ND	2.00								
1,1,1,2-Tetrachloroethane	ND	2.00								
1,1,2,2-Tetrachloroethane	ND	2.00								
Tetrachloroethene (PCE)	ND	2.00								
trans-1,2-DCE	ND	2.00								
trans-1,3-Dichloropropene	ND	2.00								
1,2,3-Trichlorobenzene	ND	2.00								
1,2,4-Trichlorobenzene	ND	2.00								
1,1,1-Trichloroethane	ND	2.00								
1,1,2-Trichloroethane	ND	2.00								
Trichloroethene (TCE)	ND	2.00								
Trichlorofluoromethane	ND	2.00								
1,2,3-Trichloropropane	ND	2.00								
Vinyl chloride	ND	2.00								
Xylenes, Total	ND	2.00								
Surr: 1,2-Dichloroethane-d4	8.40		10.00		84.0	70	130			
Surr: 4-Bromofluorobenzene	9.89		10.00		98.9	70	130			
Surr: Dibromofluoromethane	7.83		10.00		78.3	70	130			
Surr: Toluene-d8	10.3		10.00		103	70	130			

Sample ID	ics-26053		SampType:	LCS		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	LCSS		Batch ID:	26053		RunNo:	35168			
Prep Date:	6/24/2016		Analysis Date:	6/24/2016		SeqNo:	1087842	Units:	µg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.28	2.00	10.00	0	82.8	70	130			
Toluene	9.95	2.00	10.00	0	99.5	70	130			
Chlorobenzene	10.6	2.00	10.00	0	106	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	lcs-26053		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 26053		RunNo: 35168					
Prep Date:	6/24/2016		Analysis Date: 6/24/2016		SeqNo: 1087842		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	8.67	2.00	10.00	0	86.7	68	129			
Trichloroethene (TCE)	8.24	2.00	10.00	0	82.4	70	130			
Surr: 1,2-Dichloroethane-d4	8.57		10.00		85.7	70	130			
Surr: 4-Bromofluorobenzene	9.53		10.00		95.3	70	130			
Surr: Dibromofluoromethane	7.80		10.00		78.0	70	130			
Surr: Toluene-d8	9.95		10.00		99.5	70	130			

Sample ID	lcsd-26053		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 26053		RunNo: 35168					
Prep Date:	6/24/2016		Analysis Date: 6/24/2016		SeqNo: 1087843		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.09	2.00	10.00	0	80.9	70	130			
Toluene	10.3	2.00	10.00	0	103	70	130			
Chlorobenzene	10.4	2.00	10.00	0	104	70	130			
1,1-Dichloroethene	8.53	2.00	10.00	0	85.3	68	129			
Trichloroethene (TCE)	8.17	2.00	10.00	0	81.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.37		10.00		83.7	70	130			
Surr: 4-Bromofluorobenzene	9.94		10.00		99.4	70	130			
Surr: Dibromofluoromethane	7.75		10.00		77.5	70	130			
Surr: Toluene-d8	10.3		10.00		103	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	mb-25938	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	25938	RunNo:	35080					
Prep Date:	6/20/2016	Analysis Date:	6/22/2016	SeqNo:	1084875	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	0.097	0.50								J
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.40								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	0.15	0.20								J
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.40								
2,4-Dinitrophenol	0.078	0.50								J

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	mb-25938	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	25938	RunNo:	35080					
Prep Date:	6/20/2016	Analysis Date:	6/22/2016	SeqNo:	1084875	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.40								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.40								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.40								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2-Fluorophenol	2.6		3.330		77.6	28.3	102			
Surr: Phenol-d5	2.4		3.330		73.2	35.7	103			
Surr: 2,4,6-Tribromophenol	3.0		3.330		90.8	35.2	108			
Surr: Nitrobenzene-d5	1.4		1.670		82.7	24	118			
Surr: 2-Fluorobiphenyl	1.5		1.670		91.1	35.4	111			
Surr: 4-Terphenyl-d14	0.95		1.670		56.9	15	91.7			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	Ics-25938		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 25938		RunNo: 35080					
Prep Date:	6/20/2016		Analysis Date: 6/22/2016		SeqNo: 1084876		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.1	0.20	1.670	0	65.6	45.8	99.8			
4-Chloro-3-methylphenol	2.1	0.50	3.330	0	62.4	51.5	103			
2-Chlorophenol	2.1	0.20	3.330	0	62.3	46.5	105			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	60.1	45.5	103			
2,4-Dinitrotoluene	0.97	0.50	1.670	0	58.3	36	87.2			
N-Nitrosodi-n-propylamine	0.96	0.20	1.670	0	57.4	47.3	104			
4-Nitrophenol	1.9	0.25	3.330	0	58.5	47.3	95.3			
Pentachlorophenol	1.9	0.40	3.330	0	55.8	38.7	89.3			
Phenol	2.0	0.20	3.330	0	60.2	47.8	106			
Pyrene	0.99	0.20	1.670	0	59.3	33.4	105			
1,2,4-Trichlorobenzene	1.0	0.20	1.670	0	62.4	50.4	115			
Surr: 2-Fluorophenol	2.0		3.330		61.2	28.3	102			
Surr: Phenol-d5	2.1		3.330		64.5	35.7	103			
Surr: 2,4,6-Tribromophenol	2.3		3.330		69.1	35.2	108			
Surr: Nitrobenzene-d5	1.1		1.670		66.2	24	118			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.1	35.4	111			
Surr: 4-Terphenyl-d14	0.77		1.670		46.0	15	91.7			

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#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

Sample ID	MB-26037	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	26037	RunNo:	35191					
Prep Date:	6/23/2016	Analysis Date:	6/24/2016	SeqNo:	1088910	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-26037	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	26037	RunNo:	35191					
Prep Date:	6/23/2016	Analysis Date:	6/24/2016	SeqNo:	1088911	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606870

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 Confirmation Sampling

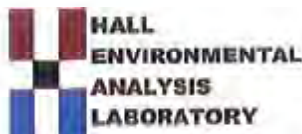
Sample ID	MB-26038	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 26038			RunNo: 35227					
Prep Date:	6/23/2016	Analysis Date: 6/27/2016			SeqNo: 1089173		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-26038		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 26038		RunNo: 35227					
Prep Date:	6/23/2016		Analysis Date: 6/27/2016		SeqNo: 1089174		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.7	80	120			
Arsenic	23	2.5	25.00	0	93.0	80	120			
Barium	23	0.10	25.00	0	93.0	80	120			
Beryllium	24	0.15	25.00	0	97.1	80	120			
Cadmium	24	0.10	25.00	0	95.4	80	120			
Chromium	23	0.30	25.00	0	92.8	80	120			
Cobalt	23	0.30	25.00	0	90.7	80	120			
Lead	22	0.25	25.00	0	89.1	80	120			
Nickel	23	0.50	25.00	0	91.4	80	120			
Selenium	24	2.5	25.00	0	95.8	80	120			
Silver	4.8	0.25	5.000	0	95.4	80	120			
Vanadium	24	2.5	25.00	0	97.5	80	120			
Zinc	23	2.5	25.00	0	91.3	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



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

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1606870

ReptNo: 1

Received by/date:

Logged By: Ashley Gallegos

6/15/2016 8:10:00 AM

Completed By: Ashley Gallegos

6/15/2016 5:38:40 PM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Client

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

Adjusted? _____

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

Checked by: _____

(If no, notify customer for authorization)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No.	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Not Present			



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

August 26, 2016

Alvin Dorsey

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: Tank 714 - Spill Confirmation

OrderNo.: 1608B86

Dear Alvin Dorsey:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/19/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:00:00 AM

Lab ID: 1608B86-001

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	720	17	91		mg/Kg	10	8/23/2016 11:33:08 AM	27095
Motor Oil Range Organics (MRO)	830	460	460		mg/Kg	10	8/23/2016 11:33:08 AM	27095
Surr: DNOP	0	0	70-130	S	%Rec	10	8/23/2016 11:33:08 AM	27095
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	2.1	0.042	0.30		mg/Kg	1	8/22/2016 5:05:40 PM	27113
Chloride	41	0.61	1.5		mg/Kg	1	8/22/2016 5:05:40 PM	27113
Nitrogen, Nitrite (As N)	0.17	0.15	0.30	J	mg/Kg	1	8/22/2016 5:05:40 PM	27113
Bromide	1.6	0.046	0.30		mg/Kg	1	8/22/2016 5:05:40 PM	27113
Nitrogen, Nitrate (As N)	31	0.32	6.0		mg/Kg	20	8/22/2016 5:42:53 PM	27113
Phosphorus, Orthophosphate (As P)	ND	0.55	1.5		mg/Kg	1	8/22/2016 5:05:40 PM	27113
Sulfate	130	0.27	1.5		mg/Kg	1	8/22/2016 5:05:40 PM	27113
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Acenaphthylene	ND	0.16	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Aniline	ND	0.18	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Anthracene	ND	0.13	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Azobenzene	ND	0.24	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benz(a)anthracene	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benzo(a)pyrene	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benzo(b)fluoranthene	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benzo(g,h,i)perylene	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benzo(k)fluoranthene	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benzoic acid	ND	0.16	0.97		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Benzyl alcohol	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Bis(2-chloroethoxy)methane	ND	0.21	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Bis(2-chloroethyl)ether	ND	0.14	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Bis(2-chloroisopropyl)ether	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Bis(2-ethylhexyl)phthalate	0.31	0.16	0.97	J	mg/Kg	1	8/23/2016 3:24:23 PM	27105
4-Bromophenyl phenyl ether	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Butyl benzyl phthalate	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Carbazole	ND	0.13	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
4-Chloro-3-methylphenol	ND	0.23	0.97		mg/Kg	1	8/23/2016 3:24:23 PM	27105
4-Chloroaniline	ND	0.21	0.97		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2-Chloronaphthalene	ND	0.15	0.48		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2-Chlorophenol	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
4-Chlorophenyl phenyl ether	ND	0.22	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Chrysene	ND	0.16	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Di-n-butyl phthalate	0.28	0.14	0.78	J	mg/Kg	1	8/23/2016 3:24:23 PM	27105

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:00:00 AM

Lab ID: 1608B86-001

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	ND	0.17	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Dibenz(a,h)anthracene	ND	0.16	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Dibenzofuran	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
1,2-Dichlorobenzene	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
1,3-Dichlorobenzene	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
1,4-Dichlorobenzene	ND	0.16	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
3,3'-Dichlorobenzidine	ND	0.14	0.48		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Diethyl phthalate	0.21	0.20	0.39	J	mg/Kg	1	8/23/2016 3:24:23 PM	27105
Dimethyl phthalate	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,4-Dichlorophenol	ND	0.18	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,4-Dimethylphenol	ND	0.21	0.58		mg/Kg	1	8/23/2016 3:24:23 PM	27105
4,6-Dinitro-2-methylphenol	ND	0.12	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,4-Dinitrophenol	ND	0.13	0.97		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,4-Dinitrotoluene	ND	0.17	0.97		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,6-Dinitrotoluene	ND	0.21	0.97		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Fluoranthene	ND	0.11	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Fluorene	ND	0.18	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Hexachlorobenzene	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Hexachlorobutadiene	ND	0.22	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Hexachlorocyclopentadiene	ND	0.22	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Hexachloroethane	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Indeno(1,2,3-cd)pyrene	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Isophorone	ND	0.21	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
1-Methylnaphthalene	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2-Methylnaphthalene	ND	0.23	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2-Methylphenol	ND	0.16	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
3+4-Methylphenol	ND	0.14	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
N-Nitrosodi-n-propylamine	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
N-Nitrosodiphenylamine	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Naphthalene	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2-Nitroaniline	ND	0.21	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
3-Nitroaniline	ND	0.17	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
4-Nitroaniline	ND	0.14	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Nitrobenzene	ND	0.20	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2-Nitrophenol	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
4-Nitrophenol	ND	0.15	0.48		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Pentachlorophenol	ND	0.12	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Phenanthrene	ND	0.13	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Phenol	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:00:00 AM

Lab ID: 1608B86-001

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	0.15	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Pyridine	ND	0.15	0.78		mg/Kg	1	8/23/2016 3:24:23 PM	27105
1,2,4-Trichlorobenzene	ND	0.21	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,4,5-Trichlorophenol	ND	0.19	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
2,4,6-Trichlorophenol	ND	0.16	0.39		mg/Kg	1	8/23/2016 3:24:23 PM	27105
Surr: 2-Fluorophenol	60.4	0	35-97.9		%Rec	1	8/23/2016 3:24:23 PM	27105
Surr: Phenol-d5	74.9	0	37.3-105		%Rec	1	8/23/2016 3:24:23 PM	27105
Surr: 2,4,6-Tribromophenol	102	0	35.6-118		%Rec	1	8/23/2016 3:24:23 PM	27105
Surr: Nitrobenzene-d5	74.5		41.2-107		%Rec	1	8/23/2016 3:24:23 PM	27105
Surr: 2-Fluorobiphenyl	99.1		41.9-119		%Rec	1	8/23/2016 3:24:23 PM	27105
Surr: 4-Terphenyl-d14	73.3		15-132		%Rec	1	8/23/2016 3:24:23 PM	27105
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.020	0.024		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Toluene	ND	0.0029	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Ethylbenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Methyl tert-butyl ether (MTBE)	ND	0.015	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2,4-Trimethylbenzene	ND	0.0036	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,3,5-Trimethylbenzene	ND	0.0035	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2-Dichloroethane (EDC)	ND	0.013	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2-Dibromoethane (EDB)	ND	0.0035	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Naphthalene	ND	0.0076	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1-Methylnaphthalene	ND	0.011	0.20		mg/Kg	1	8/23/2016 4:22:55 PM	27100
2-Methylnaphthalene	ND	0.010	0.20		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Acetone	ND	0.063	0.73		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Bromobenzene	ND	0.0039	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Bromodichloromethane	ND	0.0028	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Bromoform	ND	0.0059	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Bromomethane	ND	0.018	0.15		mg/Kg	1	8/23/2016 4:22:55 PM	27100
2-Butanone	ND	0.028	0.49		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Carbon disulfide	ND	0.016	0.49		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Carbon tetrachloride	ND	0.0032	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Chlorobenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Chloroethane	ND	0.0097	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Chloroform	ND	0.0037	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Chloromethane	ND	0.0043	0.15		mg/Kg	1	8/23/2016 4:22:55 PM	27100
2-Chlorotoluene	ND	0.0036	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
4-Chlorotoluene	ND	0.0043	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
cis-1,2-DCE	ND	0.0028	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
cis-1,3-Dichloropropene	ND	0.0045	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:00:00 AM

Lab ID: 1608B86-001

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.015	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Dibromochloromethane	ND	0.0044	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Dibromomethane	ND	0.0042	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2-Dichlorobenzene	ND	0.0043	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,3-Dichlorobenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,4-Dichlorobenzene	ND	0.0060	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Dichlorodifluoromethane	ND	0.015	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1-Dichloroethane	ND	0.0026	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1-Dichloroethene	ND	0.016	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2-Dichloropropane	ND	0.0041	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,3-Dichloropropane	ND	0.0055	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
2,2-Dichloropropane	ND	0.0028	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1-Dichloropropene	ND	0.0039	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Hexachlorobutadiene	ND	0.0060	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
2-Hexanone	ND	0.027	0.49		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Isopropylbenzene	ND	0.0042	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
4-Isopropyltoluene	ND	0.0044	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
4-Methyl-2-pentanone	ND	0.014	0.49		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Methylene chloride	ND	0.014	0.15		mg/Kg	1	8/23/2016 4:22:55 PM	27100
n-Butylbenzene	ND	0.0043	0.15		mg/Kg	1	8/23/2016 4:22:55 PM	27100
n-Propylbenzene	ND	0.0038	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
sec-Butylbenzene	ND	0.0068	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Styrene	ND	0.0044	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
tert-Butylbenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1,1,2-Tetrachloroethane	ND	0.0047	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1,2,2-Tetrachloroethane	ND	0.0079	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Tetrachloroethene (PCE)	ND	0.0040	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
trans-1,2-DCE	ND	0.014	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
trans-1,3-Dichloropropene	ND	0.0071	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2,3-Trichlorobenzene	ND	0.0073	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2,4-Trichlorobenzene	ND	0.0052	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1,1-Trichloroethane	ND	0.0030	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,1,2-Trichloroethane	ND	0.0057	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Trichloroethene (TCE)	ND	0.0052	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Trichlorofluoromethane	ND	0.0036	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
1,2,3-Trichloropropane	ND	0.0084	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Vinyl chloride	ND	0.0040	0.049		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Xylenes, Total	ND	0.0092	0.098		mg/Kg	1	8/23/2016 4:22:55 PM	27100
Surr: Dibromofluoromethane	113		70-130		%Rec	1	8/23/2016 4:22:55 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1608B86**

Date Reported: **8/26/2016**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-1

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:00:00 AM

Lab ID: 1608B86-001

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	97.4		70-130		%Rec	1	8/23/2016 4:22:55 PM	27100
Surr: Toluene-d8	95.7		70-130		%Rec	1	8/23/2016 4:22:55 PM	27100
Surr: 4-Bromofluorobenzene	101		70-130		%Rec	1	8/23/2016 4:22:55 PM	27100
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF	
Gasoline Range Organics (GRO)	0.78	0.73	4.9	J	mg/Kg	1	8/23/2016 4:22:55 PM	27100
Surr: BFB	104	0	70-130		%Rec	1	8/23/2016 4:22:55 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-2

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:09:00 AM

Lab ID: 1608B86-002

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	4100	18	98		mg/Kg	10	8/23/2016 12:17:00 PM	27095
Motor Oil Range Organics (MRO)	5100	490	490		mg/Kg	10	8/23/2016 12:17:00 PM	27095
Surr: DNOP	0	0	70-130	S	%Rec	10	8/23/2016 12:17:00 PM	27095
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	6.7	0.042	0.30		mg/Kg	1	8/22/2016 5:55:18 PM	27113
Chloride	43	0.61	1.5		mg/Kg	1	8/22/2016 5:55:18 PM	27113
Nitrogen, Nitrite (As N)	ND	0.15	0.30		mg/Kg	1	8/22/2016 5:55:18 PM	27113
Bromide	0.97	0.045	0.30		mg/Kg	1	8/22/2016 5:55:18 PM	27113
Nitrogen, Nitrate (As N)	0.80	0.016	0.30		mg/Kg	1	8/22/2016 5:55:18 PM	27113
Phosphorus, Orthophosphate (As P)	ND	0.55	1.5		mg/Kg	1	8/22/2016 5:55:18 PM	27113
Sulfate	150	0.27	1.5		mg/Kg	1	8/22/2016 5:55:18 PM	27113
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Acenaphthylene	ND	0.16	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Aniline	ND	0.19	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Anthracene	ND	0.13	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Azobenzene	ND	0.24	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benz(a)anthracene	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benzo(a)pyrene	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benzo(b)fluoranthene	ND	0.18	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benzo(g,h,i)perylene	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benzo(k)fluoranthene	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benzoic acid	ND	0.16	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Benzyl alcohol	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Bis(2-chloroethoxy)methane	ND	0.21	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Bis(2-chloroethyl)ether	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Bis(2-chloroisopropyl)ether	ND	0.18	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Bis(2-ethylhexyl)phthalate	ND	0.16	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4-Bromophenyl phenyl ether	ND	0.19	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Butyl benzyl phthalate	ND	0.18	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Carbazole	ND	0.13	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4-Chloro-3-methylphenol	ND	0.24	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4-Chloroaniline	ND	0.22	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2-Chloronaphthalene	ND	0.16	0.50		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2-Chlorophenol	ND	0.16	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4-Chlorophenyl phenyl ether	ND	0.23	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Chrysene	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Di-n-butyl phthalate	ND	0.15	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-2

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:09:00 AM

Lab ID: 1608B86-002

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	ND	0.17	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Dibenz(a,h)anthracene	ND	0.16	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Dibenzofuran	ND	0.20	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
1,2-Dichlorobenzene	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
1,3-Dichlorobenzene	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
1,4-Dichlorobenzene	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
3,3'-Dichlorobenzidine	ND	0.15	0.50		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Diethyl phthalate	ND	0.20	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Dimethyl phthalate	ND	0.19	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,4-Dichlorophenol	ND	0.18	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,4-Dimethylphenol	ND	0.21	0.59		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4,6-Dinitro-2-methylphenol	ND	0.12	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,4-Dinitrophenol	ND	0.13	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,4-Dinitrotoluene	ND	0.18	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,6-Dinitrotoluene	ND	0.21	0.99		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Fluoranthene	ND	0.11	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Fluorene	ND	0.18	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Hexachlorobenzene	ND	0.16	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Hexachlorobutadiene	ND	0.22	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Hexachlorocyclopentadiene	ND	0.23	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Hexachloroethane	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Indeno(1,2,3-cd)pyrene	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Isophorone	ND	0.22	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
1-Methylnaphthalene	ND	0.20	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2-Methylnaphthalene	ND	0.23	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2-Methylphenol	ND	0.17	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
3+4-Methylphenol	ND	0.14	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
N-Nitrosodi-n-propylamine	ND	0.19	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
N-Nitrosodiphenylamine	ND	0.19	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Naphthalene	ND	0.19	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2-Nitroaniline	ND	0.21	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
3-Nitroaniline	ND	0.17	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4-Nitroaniline	ND	0.14	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Nitrobenzene	ND	0.20	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2-Nitrophenol	ND	0.20	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
4-Nitrophenol	ND	0.15	0.50		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Pentachlorophenol	ND	0.13	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Phenanthrene	ND	0.13	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Phenol	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-2

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:09:00 AM

Lab ID: 1608B86-002

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	0.15	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Pyridine	ND	0.16	0.79		mg/Kg	1	8/23/2016 4:47:39 PM	27105
1,2,4-Trichlorobenzene	ND	0.21	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,4,5-Trichlorophenol	ND	0.20	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
2,4,6-Trichlorophenol	ND	0.16	0.40		mg/Kg	1	8/23/2016 4:47:39 PM	27105
Surr: 2-Fluorophenol	67.1	0	35-97.9		%Rec	1	8/23/2016 4:47:39 PM	27105
Surr: Phenol-d5	85.5	0	37.3-105		%Rec	1	8/23/2016 4:47:39 PM	27105
Surr: 2,4,6-Tribromophenol	97.1	0	35.6-118		%Rec	1	8/23/2016 4:47:39 PM	27105
Surr: Nitrobenzene-d5	76.8		41.2-107		%Rec	1	8/23/2016 4:47:39 PM	27105
Surr: 2-Fluorobiphenyl	89.1		41.9-119		%Rec	1	8/23/2016 4:47:39 PM	27105
Surr: 4-Terphenyl-d14	69.8		15-132		%Rec	1	8/23/2016 4:47:39 PM	27105
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.020	0.025		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Toluene	ND	0.0030	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Ethylbenzene	ND	0.0041	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Methyl tert-butyl ether (MTBE)	ND	0.016	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2,4-Trimethylbenzene	ND	0.0037	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,3,5-Trimethylbenzene	ND	0.0036	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2-Dichloroethane (EDC)	ND	0.013	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2-Dibromoethane (EDB)	ND	0.0036	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Naphthalene	ND	0.0078	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1-Methylnaphthalene	0.059	0.011	0.20	J	mg/Kg	1	8/23/2016 5:48:29 PM	27100
2-Methylnaphthalene	0.034	0.011	0.20	J	mg/Kg	1	8/23/2016 5:48:29 PM	27100
Acetone	ND	0.065	0.75		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Bromobenzene	ND	0.0040	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Bromodichloromethane	ND	0.0029	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Bromoform	ND	0.0061	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Bromomethane	ND	0.018	0.15		mg/Kg	1	8/23/2016 5:48:29 PM	27100
2-Butanone	ND	0.029	0.50		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Carbon disulfide	ND	0.017	0.50		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Carbon tetrachloride	ND	0.0033	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Chlorobenzene	ND	0.0041	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Chloroethane	ND	0.010	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Chloroform	0.0042	0.0038	0.050	J	mg/Kg	1	8/23/2016 5:48:29 PM	27100
Chloromethane	ND	0.0044	0.15		mg/Kg	1	8/23/2016 5:48:29 PM	27100
2-Chlorotoluene	ND	0.0037	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
4-Chlorotoluene	ND	0.0044	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
cis-1,2-DCE	ND	0.0029	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
cis-1,3-Dichloropropene	ND	0.0046	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-2

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:09:00 AM

Lab ID: 1608B86-002

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.015	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Dibromochloromethane	ND	0.0045	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Dibromomethane	ND	0.0043	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2-Dichlorobenzene	ND	0.0044	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,3-Dichlorobenzene	ND	0.0041	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,4-Dichlorobenzene	ND	0.0062	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Dichlorodifluoromethane	ND	0.015	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1-Dichloroethane	ND	0.0027	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1-Dichloroethene	ND	0.016	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2-Dichloropropane	ND	0.0042	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,3-Dichloropropane	ND	0.0057	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
2,2-Dichloropropane	ND	0.0029	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1-Dichloropropene	ND	0.0040	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Hexachlorobutadiene	ND	0.0061	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
2-Hexanone	ND	0.027	0.50		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Isopropylbenzene	ND	0.0043	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
4-Isopropyltoluene	ND	0.0045	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
4-Methyl-2-pentanone	ND	0.015	0.50		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Methylene chloride	ND	0.014	0.15		mg/Kg	1	8/23/2016 5:48:29 PM	27100
n-Butylbenzene	ND	0.0044	0.15		mg/Kg	1	8/23/2016 5:48:29 PM	27100
n-Propylbenzene	ND	0.0038	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
sec-Butylbenzene	ND	0.0069	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Styrene	ND	0.0045	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
tert-Butylbenzene	ND	0.0041	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1,1,2-Tetrachloroethane	ND	0.0048	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1,2,2-Tetrachloroethane	ND	0.0081	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Tetrachloroethene (PCE)	ND	0.0041	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
trans-1,2-DCE	ND	0.014	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
trans-1,3-Dichloropropene	ND	0.0073	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2,3-Trichlorobenzene	ND	0.0075	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2,4-Trichlorobenzene	ND	0.0053	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1,1-Trichloroethane	ND	0.0031	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,1,2-Trichloroethane	ND	0.0059	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Trichloroethene (TCE)	ND	0.0054	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Trichlorofluoromethane	ND	0.0037	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
1,2,3-Trichloropropane	ND	0.0086	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Vinyl chloride	ND	0.0041	0.050		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Xylenes, Total	ND	0.0095	0.10		mg/Kg	1	8/23/2016 5:48:29 PM	27100
Surr: Dibromofluoromethane	106		70-130		%Rec	1	8/23/2016 5:48:29 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-2

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:09:00 AM

Lab ID: 1608B86-002

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	89.6		70-130		%Rec	1	8/23/2016 5:48:29 PM	27100
Surr: Toluene-d8	97.9		70-130		%Rec	1	8/23/2016 5:48:29 PM	27100
Surr: 4-Bromofluorobenzene	98.2		70-130		%Rec	1	8/23/2016 5:48:29 PM	27100
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF	
Gasoline Range Organics (GRO)	0.80	0.75	5.0	J	mg/Kg	1	8/23/2016 5:48:29 PM	27100
Surr: BFB	98.9	0	70-130		%Rec	1	8/23/2016 5:48:29 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-3

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:15:00 AM

Lab ID: 1608B86-003

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	1800	18	96		mg/Kg	10	8/23/2016 1:00:50 PM	27095
Motor Oil Range Organics (MRO)	2300	480	480		mg/Kg	10	8/23/2016 1:00:50 PM	27095
Surr: DNOP	0	0	70-130	S	%Rec	10	8/23/2016 1:00:50 PM	27095
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	8.1	0.21	1.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
Chloride	36	3.1	7.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
Nitrogen, Nitrite (As N)	ND	0.75	1.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
Bromide	ND	0.23	1.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
Nitrogen, Nitrate (As N)	ND	0.080	1.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
Phosphorus, Orthophosphate (As P)	ND	2.8	7.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
Sulfate	100	1.4	7.5		mg/Kg	5	8/22/2016 6:20:07 PM	27113
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Acenaphthylene	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Aniline	ND	0.19	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Anthracene	ND	0.13	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Azobenzene	ND	0.24	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benz(a)anthracene	ND	0.17	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benzo(a)pyrene	ND	0.15	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benzo(b)fluoranthene	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benzo(g,h,i)perylene	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benzo(k)fluoranthene	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benzoic acid	ND	0.16	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Benzyl alcohol	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Bis(2-chloroethoxy)methane	ND	0.22	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Bis(2-chloroethyl)ether	ND	0.15	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Bis(2-chloroisopropyl)ether	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Bis(2-ethylhexyl)phthalate	ND	0.16	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4-Bromophenyl phenyl ether	ND	0.19	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Butyl benzyl phthalate	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Carbazole	ND	0.13	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4-Chloro-3-methylphenol	ND	0.24	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4-Chloroaniline	ND	0.22	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2-Chloronaphthalene	ND	0.16	0.50		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2-Chlorophenol	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4-Chlorophenyl phenyl ether	ND	0.23	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Chrysene	ND	0.17	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Di-n-butyl phthalate	ND	0.15	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-3

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:15:00 AM

Lab ID: 1608B86-003

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	ND	0.17	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Dibenz(a,h)anthracene	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Dibenzofuran	ND	0.20	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
1,2-Dichlorobenzene	ND	0.15	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
1,3-Dichlorobenzene	ND	0.15	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
1,4-Dichlorobenzene	ND	0.17	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
3,3'-Dichlorobenzidine	ND	0.15	0.50		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Diethyl phthalate	ND	0.20	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Dimethyl phthalate	ND	0.19	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,4-Dichlorophenol	ND	0.19	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,4-Dimethylphenol	ND	0.22	0.60		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4,6-Dinitro-2-methylphenol	ND	0.12	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,4-Dinitrophenol	ND	0.13	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,4-Dinitrotoluene	ND	0.18	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,6-Dinitrotoluene	ND	0.21	0.99		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Fluoranthene	ND	0.11	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Fluorene	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Hexachlorobenzene	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Hexachlorobutadiene	ND	0.22	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Hexachlorocyclopentadiene	ND	0.23	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Hexachloroethane	ND	0.17	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Indeno(1,2,3-cd)pyrene	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Isophorone	ND	0.22	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
1-Methylnaphthalene	ND	0.20	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2-Methylnaphthalene	ND	0.24	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2-Methylphenol	ND	0.17	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
3+4-Methylphenol	ND	0.14	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
N-Nitrosodi-n-propylamine	ND	0.19	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
N-Nitrosodiphenylamine	ND	0.19	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Naphthalene	ND	0.19	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2-Nitroaniline	ND	0.21	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
3-Nitroaniline	ND	0.18	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4-Nitroaniline	ND	0.14	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Nitrobenzene	ND	0.21	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2-Nitrophenol	ND	0.20	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
4-Nitrophenol	ND	0.15	0.50		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Pentachlorophenol	ND	0.13	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Phenanthrene	ND	0.13	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Phenol	ND	0.15	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-3

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:15:00 AM

Lab ID: 1608B86-003

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	0.15	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Pyridine	ND	0.16	0.80		mg/Kg	1	8/23/2016 5:15:24 PM	27105
1,2,4-Trichlorobenzene	ND	0.21	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,4,5-Trichlorophenol	ND	0.20	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
2,4,6-Trichlorophenol	ND	0.16	0.40		mg/Kg	1	8/23/2016 5:15:24 PM	27105
Surr: 2-Fluorophenol	65.8	0	35-97.9		%Rec	1	8/23/2016 5:15:24 PM	27105
Surr: Phenol-d5	80.3	0	37.3-105		%Rec	1	8/23/2016 5:15:24 PM	27105
Surr: 2,4,6-Tribromophenol	90.1	0	35.6-118		%Rec	1	8/23/2016 5:15:24 PM	27105
Surr: Nitrobenzene-d5	81.7		41.2-107		%Rec	1	8/23/2016 5:15:24 PM	27105
Surr: 2-Fluorobiphenyl	94.4		41.9-119		%Rec	1	8/23/2016 5:15:24 PM	27105
Surr: 4-Terphenyl-d14	65.4		15-132		%Rec	1	8/23/2016 5:15:24 PM	27105
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.020	0.025		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Toluene	ND	0.0029	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Ethylbenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Methyl tert-butyl ether (MTBE)	ND	0.016	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2,4-Trimethylbenzene	ND	0.0036	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,3,5-Trimethylbenzene	ND	0.0036	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2-Dichloroethane (EDC)	ND	0.013	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2-Dibromoethane (EDB)	ND	0.0035	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Naphthalene	ND	0.0077	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1-Methylnaphthalene	0.035	0.011	0.20	J	mg/Kg	1	8/23/2016 7:14:06 PM	27100
2-Methylnaphthalene	ND	0.011	0.20		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Acetone	ND	0.064	0.74		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Bromobenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Bromodichloromethane	ND	0.0029	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Bromoform	ND	0.0060	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Bromomethane	ND	0.018	0.15		mg/Kg	1	8/23/2016 7:14:06 PM	27100
2-Butanone	ND	0.028	0.49		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Carbon disulfide	ND	0.016	0.49		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Carbon tetrachloride	ND	0.0032	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Chlorobenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Chloroethane	ND	0.0098	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Chloroform	ND	0.0037	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Chloromethane	ND	0.0044	0.15		mg/Kg	1	8/23/2016 7:14:06 PM	27100
2-Chlorotoluene	ND	0.0036	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
4-Chlorotoluene	ND	0.0044	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
cis-1,2-DCE	ND	0.0029	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
cis-1,3-Dichloropropene	ND	0.0045	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1608B86

Date Reported: 8/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-3

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:15:00 AM

Lab ID: 1608B86-003

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.015	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Dibromochloromethane	ND	0.0045	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Dibromomethane	ND	0.0043	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2-Dichlorobenzene	ND	0.0043	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,3-Dichlorobenzene	ND	0.0040	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,4-Dichlorobenzene	ND	0.0061	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Dichlorodifluoromethane	ND	0.015	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1-Dichloroethane	ND	0.0027	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1-Dichloroethene	ND	0.016	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2-Dichloropropane	ND	0.0041	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,3-Dichloropropane	ND	0.0056	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
2,2-Dichloropropane	ND	0.0028	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1-Dichloropropene	ND	0.0039	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Hexachlorobutadiene	ND	0.0060	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
2-Hexanone	ND	0.027	0.49		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Isopropylbenzene	ND	0.0042	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
4-Isopropyltoluene	ND	0.0044	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
4-Methyl-2-pentanone	ND	0.014	0.49		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Methylene chloride	ND	0.014	0.15		mg/Kg	1	8/23/2016 7:14:06 PM	27100
n-Butylbenzene	ND	0.0044	0.15		mg/Kg	1	8/23/2016 7:14:06 PM	27100
n-Propylbenzene	ND	0.0038	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
sec-Butylbenzene	ND	0.0068	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Styrene	ND	0.0044	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
tert-Butylbenzene	ND	0.0041	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1,1,2-Tetrachloroethane	ND	0.0047	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1,2,2-Tetrachloroethane	ND	0.0080	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Tetrachloroethene (PCE)	ND	0.0041	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
trans-1,2-DCE	ND	0.014	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
trans-1,3-Dichloropropene	ND	0.0072	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2,3-Trichlorobenzene	ND	0.0074	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2,4-Trichlorobenzene	ND	0.0053	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1,1-Trichloroethane	ND	0.0030	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,1,2-Trichloroethane	ND	0.0058	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Trichloroethene (TCE)	ND	0.0053	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Trichlorofluoromethane	ND	0.0037	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
1,2,3-Trichloropropane	ND	0.0085	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Vinyl chloride	ND	0.0040	0.049		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Xylenes, Total	ND	0.0093	0.099		mg/Kg	1	8/23/2016 7:14:06 PM	27100
Surr: Dibromofluoromethane	105		70-130		%Rec	1	8/23/2016 7:14:06 PM	27100

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1608B86**

Date Reported: **8/26/2016**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-3

Project: Tank 714 - Spill Confirmation

Collection Date: 8/16/2016 10:15:00 AM

Lab ID: 1608B86-003

Matrix: SOIL

Received Date: 8/19/2016 3:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	84.1		70-130		%Rec	1	8/23/2016 7:14:06 PM	27100
Surr: Toluene-d8	97.9		70-130		%Rec	1	8/23/2016 7:14:06 PM	27100
Surr: 4-Bromofluorobenzene	94.0		70-130		%Rec	1	8/23/2016 7:14:06 PM	27100
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF	
Gasoline Range Organics (GRO)	0.85	0.74	4.9	J	mg/Kg	1	8/23/2016 7:14:06 PM	27100
Surr: BFB	97.2	0	70-130		%Rec	1	8/23/2016 7:14:06 PM	27100

Refer to the QC Summary report and 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID MB-27113	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 27113	RunNo: 36677								
Prep Date: 8/22/2016	Analysis Date: 8/22/2016	SeqNo: 1136325	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.30								
Bromide	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								
Phosphorus, Orthophosphate (As P)	ND	1.5								
Sulfate	0.37	1.5								J

Sample ID LCS-27113	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 27113	RunNo: 36677								
Prep Date: 8/22/2016	Analysis Date: 8/22/2016	SeqNo: 1136326	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.30	1.500	0	99.7	90	110			
Chloride	14	1.5	15.00	0	94.2	90	110			
Nitrogen, Nitrite (As N)	2.9	0.30	3.000	0	95.6	90	110			
Bromide	7.2	0.30	7.500	0	95.9	90	110			
Nitrogen, Nitrate (As N)	7.4	0.30	7.500	0	98.6	90	110			
Phosphorus, Orthophosphate (As P)	14	1.5	15.00	0	96.1	90	110			
Sulfate	29	1.5	30.00	0	97.8	90	110			

Sample ID 1608B86-001AMS	SampType: ms	TestCode: EPA Method 300.0: Anions								
Client ID: T-714-1	Batch ID: 27113	RunNo: 36677								
Prep Date: 8/22/2016	Analysis Date: 8/22/2016	SeqNo: 1136351	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.30	1.500	2.081	18.3	15	110			
Chloride	41	1.5	15.00	40.84	3.55	70.8	119			S
Nitrogen, Nitrite (As N)	2.9	0.30	3.000	0.1729	90.7	71.5	113			
Bromide	8.1	0.30	7.500	1.610	86.2	81.1	111			
Phosphorus, Orthophosphate (As P)	2.0	1.5	15.00	0	13.6	15	105			S
Sulfate	96	1.5	30.00	130.5	-115	25.1	158			S

Sample ID 1608B86-001AMSD	SampType: msd	TestCode: EPA Method 300.0: Anions								
Client ID: T-714-1	Batch ID: 27113	RunNo: 36677								
Prep Date: 8/22/2016	Analysis Date: 8/22/2016	SeqNo: 1136352	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.30	1.500	2.081	18.3	15	110	0.0153	20	
Chloride	43	1.5	15.00	40.84	11.9	70.8	119	3.00	20	S

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#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	1608B86-001AMSD	SampType:	msd	TestCode:	EPA Method 300.0: Anions					
Client ID:	T-714-1	Batch ID:	27113	RunNo:	36677					
Prep Date:	8/22/2016	Analysis Date:	8/22/2016	SeqNo:	1136352	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	2.9	0.30	3.000	0.1729	90.7	71.5	113	0.0332	20	
Bromide	8.2	0.30	7.500	1.610	87.8	81.1	111	1.45	20	
Phosphorus, Orthophosphate (As P	1.8	1.5	15.00	0	11.9	15	105	13.0	20	S
Sulfate	110	1.5	30.00	130.5	-74.6	25.1	158	12.0	20	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	LCS-27095		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 27095		RunNo: 36683					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1136774		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.9	62.6	124			
Surr: DNOP	4.2		5.000		83.3	70	130			

Sample ID	MB-27095	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 27095			RunNo: 36683					
Prep Date:	8/22/2016	Analysis Date: 8/23/2016			SeqNo: 1136775		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			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	mb-27100	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID:	27100	RunNo:	36701					
Prep Date:	8/22/2016	Analysis Date:	8/23/2016	SeqNo:	1137263	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	0.026	0.15								J
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.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	mb-27100		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	PBS		Batch ID:	27100		RunNo:	36701			
Prep Date:	8/22/2016		Analysis Date:	8/23/2016		SeqNo:	1137263		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	0.031	0.50								J
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	0.55		0.5000		110	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.9	70	130			
Surr: Toluene-d8	0.47		0.5000		93.7	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.2	70	130			

Sample ID	lcs-27100		SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	LCSS		Batch ID:	27100		RunNo:	36701			
Prep Date:	8/22/2016		Analysis Date:	8/23/2016		SeqNo:	1137264		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	121	70	130			
Toluene	1.0	0.050	1.000	0	102	70	130			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	lcs-27100		SampType: LCS		TestCode: EPA Method 8260B: Volatiles					
Client ID:	LCSS		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137264		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.4	0.050	1.000	0	138	70	130			S
Trichloroethene (TCE)	1.1	0.050	1.000	0	113	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		97.0	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.2	70	130			

Sample ID	1608b86-002ams		SampType: MS		TestCode: EPA Method 8260B: Volatiles					
Client ID:	T-714-2		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137267		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9579	0	118	49.2	155			
Toluene	1.0	0.048	0.9579	0	108	52	154			
Chlorobenzene	1.0	0.048	0.9579	0	107	53.2	150			
1,1-Dichloroethene	1.1	0.048	0.9579	0	113	34.2	163			
Trichloroethene (TCE)	1.0	0.048	0.9579	0	109	48.2	151			
Surr: Dibromofluoromethane	0.49		0.4789		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.4789		89.6	70	130			
Surr: Toluene-d8	0.47		0.4789		98.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.4789		100	70	130			

Sample ID	1608b86-002amsd		SampType: MSD		TestCode: EPA Method 8260B: Volatiles					
Client ID:	T-714-2		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137269		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	0.9804	0	127	49.2	155	10.0	20	
Toluene	1.1	0.049	0.9804	0	111	52	154	5.29	20	
Chlorobenzene	1.1	0.049	0.9804	0	112	53.2	150	6.43	20	
1,1-Dichloroethene	1.2	0.049	0.9804	0	121	34.2	163	9.06	20	
Trichloroethene (TCE)	1.2	0.049	0.9804	0	118	48.2	151	10.7	20	
Surr: Dibromofluoromethane	0.52		0.4902		106	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.46		0.4902		93.6	70	130	0	0	
Surr: Toluene-d8	0.48		0.4902		98.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.47		0.4902		96.1	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#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	mb-27105	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	27105	RunNo:	36691					
Prep Date:	8/22/2016	Analysis Date:	8/23/2016	SeqNo:	1137011	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	0.098	0.50								J
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	0.17	0.50								J
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	0.17	0.40								J
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	0.11	0.20								J
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.40								
2,4-Dinitrophenol	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	mb-27105	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	27105	RunNo:	36691					
Prep Date:	8/22/2016	Analysis Date:	8/23/2016	SeqNo:	1137011	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.40								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.40								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.40								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.40								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2-Fluorophenol	2.1		3.330		63.7	35	97.9			
Surr: Phenol-d5	2.4		3.330		70.7	37.3	105			
Surr: 2,4,6-Tribromophenol	2.6		3.330		79.4	35.6	118			
Surr: Nitrobenzene-d5	1.1		1.670		65.0	41.2	107			
Surr: 2-Fluorobiphenyl	1.1		1.670		67.8	41.9	119			
Surr: 4-Terphenyl-d14	0.85		1.670		51.1	15	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	Ics-27105		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 27105		RunNo: 36691					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137012		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	72.1	45.8	99.8			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	78.0	51.5	103			
2-Chlorophenol	2.3	0.20	3.330	0	70.5	46.5	105			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	65.1	45.5	103			
2,4-Dinitrotoluene	1.1	0.50	1.670	0	63.1	36	87.2			
N-Nitrosodi-n-propylamine	0.94	0.20	1.670	0	56.5	47.3	104			
4-Nitrophenol	2.1	0.25	3.330	0	64.0	47.3	95.3			
Pentachlorophenol	2.4	0.40	3.330	0	72.8	38.7	89.3			
Phenol	2.2	0.20	3.330	0	66.8	47.8	106			
Pyrene	1.3	0.20	1.670	0	77.2	33.4	105			
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	82.1	50.4	115			
Surr: 2-Fluorophenol	2.0		3.330		61.0	35	97.9			
Surr: Phenol-d5	2.3		3.330		67.6	37.3	105			
Surr: 2,4,6-Tribromophenol	2.8		3.330		85.3	35.6	118			
Surr: Nitrobenzene-d5	1.2		1.670		71.7	41.2	107			
Surr: 2-Fluorobiphenyl	1.2		1.670		70.6	41.9	119			
Surr: 4-Terphenyl-d14	0.94		1.670		56.4	15	132			

Sample ID	1608B86-001Ams		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	T-714-1		Batch ID: 27105		RunNo: 36691					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.663	0	78.6	39.3	86.4			
4-Chloro-3-methylphenol	2.8	1.0	3.317	0	84.0	37.5	96.4			
2-Chlorophenol	1.6	0.40	3.317	0	49.3	37.4	90.6			
1,4-Dichlorobenzene	0.64	0.40	1.663	0	38.4	31.7	85			
2,4-Dinitrotoluene	1.3	1.0	1.663	0	80.1	26.4	86			
N-Nitrosodi-n-propylamine	0.86	0.40	1.663	0	51.4	43.5	83			
4-Nitrophenol	2.6	0.50	3.317	0	77.2	32.7	98			
Pentachlorophenol	2.7	0.80	3.317	0	82.5	26.6	87.4			
Phenol	1.9	0.40	3.317	0	58.0	40.5	85.3			
Pyrene	1.6	0.40	1.663	0	95.0	23.2	93.9			S
1,2,4-Trichlorobenzene	1.1	0.40	1.663	0	68.9	38.7	99			
Surr: 2-Fluorophenol	1.4		3.317		43.1	35	97.9			
Surr: Phenol-d5	2.1		3.317		62.0	37.3	105			
Surr: 2,4,6-Tribromophenol	3.1		3.317		93.4	35.6	118			
Surr: Nitrobenzene-d5	0.86		1.663		51.9	41.2	107			
Surr: 2-Fluorobiphenyl	1.4		1.663		86.6	41.9	119			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	1608B86-001Ams	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	T-714-1	Batch ID:	27105	RunNo:	36691					
Prep Date:	8/22/2016	Analysis Date:	8/23/2016	SeqNo:	1137016	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	1.0		1.663		62.0	15	132			

Sample ID	1608B86-001Amsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	T-714-1	Batch ID:	27105	RunNo:	36691					
Prep Date:	8/22/2016	Analysis Date:	8/23/2016	SeqNo:	1137017	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.40	1.651	0	91.0	39.3	86.4	13.8	30.2	S
4-Chloro-3-methylphenol	3.1	0.99	3.292	0	94.2	37.5	96.4	10.7	37.2	
2-Chlorophenol	1.9	0.40	3.292	0	58.6	37.4	90.6	16.5	48	
1,4-Dichlorobenzene	0.77	0.40	1.651	0	46.9	31.7	85	19.2	40.6	
2,4-Dinitrotoluene	1.4	0.99	1.651	0	86.7	26.4	86	7.14	47.7	S
N-Nitrosodi-n-propylamine	0.96	0.40	1.651	0	58.4	43.5	83	12.0	52.5	
4-Nitrophenol	3.4	0.49	3.292	0	105	32.7	98	29.4	36.6	S
Pentachlorophenol	3.0	0.79	3.292	0	89.9	26.6	87.4	7.84	65.5	S
Phenol	2.1	0.40	3.292	0	64.8	40.5	85.3	10.3	44	
Pyrene	1.6	0.40	1.651	0	97.0	23.2	93.9	1.36	42.1	S
1,2,4-Trichlorobenzene	1.3	0.40	1.651	0	78.2	38.7	99	11.9	31.5	
Surr: 2-Fluorophenol	1.6		3.292		47.7	35	97.9	0	0	
Surr: Phenol-d5	2.2		3.292		67.6	37.3	105	0	0	
Surr: 2,4,6-Tribromophenol	3.3		3.292		98.9	35.6	118	0	0	
Surr: Nitrobenzene-d5	0.96		1.651		58.0	41.2	107	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.651		91.5	41.9	119	0	0	
Surr: 4-Terphenyl-d14	1.0		1.651		61.7	15	132	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608B86

26-Aug-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 - Spill Confirmation

Sample ID	mb-27100		SampType: MBLK		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137291		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	500		500.0		99.6	70	130			

Sample ID	lcs-27100		SampType: LCS		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137292		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.1	62.9	123			
Surr: BFB	490		500.0		98.1	70	130			

Sample ID	1608b86-001ams		SampType: MS		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	T-714-1		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137294		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.81	0.7805	115	52.3	132			
Surr: BFB	480		476.2		101	70	130			

Sample ID	1608b86-001amsd		SampType: MSD		TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	T-714-1		Batch ID: 27100		RunNo: 36701					
Prep Date:	8/22/2016		Analysis Date: 8/23/2016		SeqNo: 1137295		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	23.19	0.7805	95.9	52.3	132	19.8	20	
Surr: BFB	450		463.8		96.8	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1608B86

RcptNo: 1

Received by/date:

AT 08/19/16

Logged By:

Michelle Garcia

8/19/2016 3:00:00 PM

Michelle Garcia

Completed By:

Michelle Garcia

8/19/2016 5:16:47 PM

Michelle Garcia

Reviewed By:

JC 08/22/16

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			



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

October 26, 2016

Ed Riege

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: TANK T-714

OrderNo.: 1609A18

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/16/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1609A18

Date Reported: 10/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-A (0-6")

Project: TANK T-714

Collection Date: 9/14/2016 9:40:00 AM

Lab ID: 1609A18-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM	
Diesel Range Organics (DRO)	ND	1.8	9.8		mg/Kg	1	9/28/2016 11:04:19 PM	27738
Motor Oil Range Organics (MRO)	ND	49	49		mg/Kg	1	9/28/2016 11:04:19 PM	27738
Surr: DNOP	106	0	70-130		%Rec	1	9/28/2016 11:04:19 PM	27738
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.015	0.00056	0.032	J	mg/Kg	1	9/22/2016 2:05:28 PM	27628
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	1.0	0.96	2.4	J	mg/Kg	1	9/29/2016 12:01:34 AM	27620
Arsenic	1.6	0.85	2.4	J	mg/Kg	1	9/23/2016 10:40:44 AM	27620
Barium	190	0.068	0.095		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Beryllium	0.50	0.033	0.14		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Cadmium	ND	0.061	0.095		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Chromium	8.3	0.090	0.29		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Cobalt	3.7	0.11	0.29		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Lead	4.9	0.17	0.24		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Nickel	5.9	0.14	0.48		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Selenium	ND	1.7	2.4		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Silver	ND	0.060	0.24		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Vanadium	16	0.17	2.4		mg/Kg	1	9/23/2016 10:40:44 AM	27620
Zinc	21	0.33	2.4		mg/Kg	1	9/23/2016 10:40:44 AM	27620
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	0.085	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Acenaphthylene	ND	0.081	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Aniline	ND	0.094	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Anthracene	ND	0.066	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Azobenzene	ND	0.12	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benz(a)anthracene	ND	0.086	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benzo(a)pyrene	ND	0.075	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benzo(b)fluoranthene	ND	0.090	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benzo(g,h,i)perylene	ND	0.088	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benzo(k)fluoranthene	ND	0.088	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benzoic acid	ND	0.082	0.50		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Benzyl alcohol	ND	0.078	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Bis(2-chloroethoxy)methane	ND	0.11	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Bis(2-chloroethyl)ether	ND	0.073	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Bis(2-chloroisopropyl)ether	ND	0.089	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Bis(2-ethylhexyl)phthalate	0.13	0.081	0.50	J	mg/Kg	1	9/29/2016 3:07:57 PM	27700
4-Bromophenyl phenyl ether	ND	0.095	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Butyl benzyl phthalate	ND	0.088	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A18

Date Reported: 10/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-A (0-6")

Project: TANK T-714

Collection Date: 9/14/2016 9:40:00 AM

Lab ID: 1609A18-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Carbazole	ND	0.067	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
4-Chloro-3-methylphenol	ND	0.12	0.50		mg/Kg	1	9/29/2016 3:07:57 PM	27700
4-Chloroaniline	ND	0.11	0.50		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2-Chloronaphthalene	ND	0.078	0.25		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2-Chlorophenol	ND	0.078	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
4-Chlorophenyl phenyl ether	ND	0.11	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Chrysene	ND	0.085	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Di-n-butyl phthalate	0.11	0.074	0.40	J	mg/Kg	1	9/29/2016 3:07:57 PM	27700
Di-n-octyl phthalate	ND	0.085	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Dibenz(a,h)anthracene	ND	0.080	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Dibenzofuran	ND	0.10	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
1,2-Dichlorobenzene	ND	0.076	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
1,3-Dichlorobenzene	ND	0.077	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
1,4-Dichlorobenzene	ND	0.084	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
3,3'-Dichlorobenzidine	ND	0.073	0.25		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Diethyl phthalate	0.12	0.10	0.20	J	mg/Kg	1	9/29/2016 3:07:57 PM	27700
Dimethyl phthalate	ND	0.097	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,4-Dichlorophenol	ND	0.093	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,4-Dimethylphenol	ND	0.11	0.30		mg/Kg	1	9/29/2016 3:07:57 PM	27700
4,6-Dinitro-2-methylphenol	ND	0.060	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,4-Dinitrophenol	ND	0.066	0.50		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,4-Dinitrotoluene	ND	0.089	0.50		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,6-Dinitrotoluene	ND	0.11	0.50		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Fluoranthene	ND	0.057	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Fluorene	ND	0.091	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Hexachlorobenzene	ND	0.078	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Hexachlorobutadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Hexachlorocyclopentadiene	ND	0.11	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Hexachloroethane	ND	0.085	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Indeno(1,2,3-cd)pyrene	ND	0.078	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Isophorone	ND	0.11	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
1-Methylnaphthalene	ND	0.10	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2-Methylnaphthalene	ND	0.12	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2-Methylphenol	ND	0.083	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
3+4-Methylphenol	ND	0.072	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
N-Nitrosodi-n-propylamine	ND	0.096	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
N-Nitrosodiphenylamine	ND	0.097	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Naphthalene	ND	0.095	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2-Nitroaniline	ND	0.11	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A18

Date Reported: 10/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-A (0-6")

Project: TANK T-714

Collection Date: 9/14/2016 9:40:00 AM

Lab ID: 1609A18-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
3-Nitroaniline	ND	0.088	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
4-Nitroaniline	ND	0.070	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Nitrobenzene	ND	0.10	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2-Nitrophenol	ND	0.099	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
4-Nitrophenol	ND	0.076	0.25		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Pentachlorophenol	ND	0.064	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Phenanthrene	ND	0.068	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Phenol	ND	0.075	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Pyrene	ND	0.075	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Pyridine	ND	0.079	0.40		mg/Kg	1	9/29/2016 3:07:57 PM	27700
1,2,4-Trichlorobenzene	ND	0.11	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,4,5-Trichlorophenol	ND	0.10	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
2,4,6-Trichlorophenol	ND	0.083	0.20		mg/Kg	1	9/29/2016 3:07:57 PM	27700
Surr: 2-Fluorophenol	58.2	0	35-97.9		%Rec	1	9/29/2016 3:07:57 PM	27700
Surr: Phenol-d5	62.8	0	37.3-105		%Rec	1	9/29/2016 3:07:57 PM	27700
Surr: 2,4,6-Tribromophenol	68.5	0	35.6-118		%Rec	1	9/29/2016 3:07:57 PM	27700
Surr: Nitrobenzene-d5	55.4		41.2-107		%Rec	1	9/29/2016 3:07:57 PM	27700
Surr: 2-Fluorobiphenyl	57.5		41.9-119		%Rec	1	9/29/2016 3:07:57 PM	27700
Surr: 4-Terphenyl-d14	51.4		15-132		%Rec	1	9/29/2016 3:07:57 PM	27700
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Toluene	0.203	0.196	1.62	J	µg/Kg	1	9/21/2016 12:25:00 PM	27629
Ethylbenzene	ND	0.218	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Methyl tert-butyl ether (MTBE)	ND	0.272	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2,4-Trimethylbenzene	ND	0.275	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,3,5-Trimethylbenzene	ND	0.268	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2-Dichloroethane (EDC)	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2-Dibromoethane (EDB)	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Naphthalene	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1-Methylnaphthalene	ND	0.184	3.24		µg/Kg	1	9/21/2016 12:25:00 PM	27629
2-Methylnaphthalene	ND	0.427	3.24		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Acetone	45.4	0.480	8.11		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Bromobenzene	ND	0.165	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Bromodichloromethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Bromoform	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Bromomethane	0.835	0.292	2.43	J	µg/Kg	1	9/21/2016 12:25:00 PM	27629
2-Butanone	6.09	0.585	8.11	J	µg/Kg	1	9/21/2016 12:25:00 PM	27629
Carbon disulfide	ND	0.600	8.11		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Carbon tetrachloride	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629

Refer to the QC Summary report and 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: T-714-A (0-6")

Project: TANK T-714

Collection Date: 9/14/2016 9:40:00 AM

Lab ID: 1609A18-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Chlorobenzene	ND	0.186	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Chloroethane	ND	0.299	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Chloroform	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Chloromethane	ND	0.411	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
2-Chlorotoluene	ND	0.276	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
4-Chlorotoluene	ND	0.270	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
cis-1,2-DCE	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
cis-1,3-Dichloropropene	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2-Dibromo-3-chloropropane	ND	0.173	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Dibromochloromethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Dibromomethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2-Dichlorobenzene	ND	0.236	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,3-Dichlorobenzene	ND	0.299	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,4-Dichlorobenzene	ND	0.304	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Dichlorodifluoromethane	ND	0.947	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,1-Dichloroethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,1-Dichloroethene	ND	0.265	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2-Dichloropropane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,3-Dichloropropane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
2,2-Dichloropropane	ND	0.205	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,1-Dichloropropene	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Hexachlorobutadiene	ND	0.370	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
2-Hexanone	ND	0.404	8.11		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Isopropylbenzene	ND	0.204	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
4-Isopropyltoluene	ND	0.304	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
4-Methyl-2-pentanone	ND	3.24	8.11		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Methylene chloride	ND	1.62	2.43		µg/Kg	1	9/21/2016 12:25:00 PM	27629
n-Butylbenzene	ND	0.395	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
n-Propylbenzene	ND	0.290	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
sec-Butylbenzene	ND	0.288	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Styrene	ND	0.207	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
tert-Butylbenzene	ND	0.237	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,1,1,2-Tetrachloroethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,1,2,2-Tetrachloroethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Tetrachloroethene (PCE)	ND	0.213	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
trans-1,2-DCE	ND	0.164	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
trans-1,3-Dichloropropene	ND	0.196	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2,3-Trichlorobenzene	ND	0.392	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2,4-Trichlorobenzene	ND	0.492	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629

Refer to the QC Summary report and 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.

Analytical Report

Lab Order 1609A18

Date Reported: 10/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: T-714-A (0-6")

Project: TANK T-714

Collection Date: 9/14/2016 9:40:00 AM

Lab ID: 1609A18-001

Matrix: SOIL

Received Date: 9/16/2016 2:00:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
1,1,1-Trichloroethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,1,2-Trichloroethane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Trichloroethene (TCE)	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Trichlorofluoromethane	ND	0.204	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
1,2,3-Trichloropropane	ND	1.62	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Vinyl chloride	ND	0.427	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Xylenes, Total	ND	0.646	1.62		µg/Kg	1	9/21/2016 12:25:00 PM	27629
Surr: 1,2-Dichloroethane-d4	118	0	70-130		%Rec	1	9/21/2016 12:25:00 PM	27629
Surr: 4-Bromofluorobenzene	105	0	70-130		%Rec	1	9/21/2016 12:25:00 PM	27629
Surr: Dibromofluoromethane	110	0	70-130		%Rec	1	9/21/2016 12:25:00 PM	27629
Surr: Toluene-d8	99.7	0	70-130		%Rec	1	9/21/2016 12:25:00 PM	27629
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG	
Gasoline Range Organics (GRO)	ND	0.42	2.8		mg/Kg	1	9/20/2016 8:39:25 AM	W37308
Surr: BFB	101	0	70-130		%Rec	1	9/20/2016 8:39:25 AM	W37308

Refer to the QC Summary report and 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

Anatek Labs, Inc.

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

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

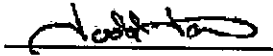
Batch #: 160921028
Project Name: 1609A18

Analytical Results Report

Sample Number 160921028-001 **Sampling Date** 9/14/2016 **Date/Time Received** 9/21/2016 11:10 AM
Client Sample ID 1609A18-001C / T-714-A (0-6) **Sampling Time** 9:40 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.04	mg/Kg	0.271	9/28/2016	MER	EPA 335.4	
%moisture	15.3	Percent		9/26/2016	MER	%moisture	

Authorized Signature


Todd Taruscio, Lab Manager

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

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

Anatek Labs, Inc.

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

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

Batch #: 160921028
Project Name: 1609A18

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.512	mg/kg	0.5	102.4	90-110	9/28/2016	9/28/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160921029-001	Cyanide	ND	14.9	mg/kg	14.6	102.1	70-130	9/28/2016	9/28/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	15.0	mg/kg	14.6	102.7	0.7	0-25	9/28/2016	9/28/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	5	9/28/2016	9/28/2016

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

Comments:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	MB-27738	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	27738		RunNo:	37494				
Prep Date:	9/27/2016	Analysis Date:	9/28/2016		SeqNo:	1167146		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	8.7		10.00		87.1	70	130			

Sample ID	LCS-27738		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 27738		RunNo: 37494					
Prep Date:	9/27/2016		Analysis Date: 9/28/2016		SeqNo: 1167147		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.8	62.6	124			
Surr: DNOP	4.6		5.000		91.2	70	130			

Sample ID	1609A18-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	T-714-A (0-6")		Batch ID: 27738		RunNo: 37555					
Prep Date:	9/27/2016		Analysis Date: 9/29/2016		SeqNo: 1168725		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.4	46.99	0	115	33.9	141			
Surr: DNOP	4.6		4.699		96.9	70	130			

Sample ID	1609A18-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	T-714-A (0-6")		Batch ID:	27738		RunNo:	37555				
Prep Date:	9/27/2016		Analysis Date:	9/29/2016		SeqNo:	1168778		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	54	10	50.00	0	107	33.9	141	0.732	20		
Surr: DNOP	4.7		5.000		94.2	70	130	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	MB-27629	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	27629	RunNo:	37389					
Prep Date:	9/21/2016	Analysis Date:	9/21/2016	SeqNo:	1162057	Units:	µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.00								
Toluene	ND	2.00								
Ethylbenzene	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	2.00								
1,2,4-Trimethylbenzene	ND	2.00								
1,3,5-Trimethylbenzene	ND	2.00								
1,2-Dichloroethane (EDC)	ND	2.00								
1,2-Dibromoethane (EDB)	ND	2.00								
Naphthalene	ND	2.00								
1-Methylnaphthalene	0.360	4.00								J
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	2.00								
Bromodichloromethane	ND	2.00								
Bromoform	ND	2.00								
Bromomethane	ND	3.00								
2-Butanone	ND	10.0								
Carbon disulfide	ND	10.0								
Carbon tetrachloride	ND	2.00								
Chlorobenzene	ND	2.00								
Chloroethane	ND	2.00								
Chloroform	ND	2.00								
Chloromethane	ND	2.00								
2-Chlorotoluene	ND	2.00								
4-Chlorotoluene	ND	2.00								
cis-1,2-DCE	ND	2.00								
cis-1,3-Dichloropropene	ND	2.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	2.00								
Dibromomethane	ND	2.00								
1,2-Dichlorobenzene	ND	2.00								
1,3-Dichlorobenzene	ND	2.00								
1,4-Dichlorobenzene	ND	2.00								
Dichlorodifluoromethane	ND	2.00								
1,1-Dichloroethane	ND	2.00								
1,1-Dichloroethene	ND	2.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	2.00								
2,2-Dichloropropane	ND	2.00								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	MB-27629		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	27629		RunNo:	37389			
Prep Date:	9/21/2016		Analysis Date:	9/21/2016		SeqNo:	1162057	Units:	µg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	2.00								
Hexachlorobutadiene	ND	2.00								
2-Hexanone	ND	10.0								
Isopropylbenzene	ND	2.00								
4-Isopropyltoluene	ND	2.00								
4-Methyl-2-pentanone	ND	10.0								
Methylene chloride	ND	3.00								
n-Butylbenzene	ND	2.00								
n-Propylbenzene	ND	2.00								
sec-Butylbenzene	ND	2.00								
Styrene	0.320	2.00								J
tert-Butylbenzene	ND	2.00								
1,1,1,2-Tetrachloroethane	ND	2.00								
1,1,2,2-Tetrachloroethane	ND	2.00								
Tetrachloroethene (PCE)	ND	2.00								
trans-1,2-DCE	ND	2.00								
trans-1,3-Dichloropropene	ND	2.00								
1,2,3-Trichlorobenzene	ND	2.00								
1,2,4-Trichlorobenzene	ND	2.00								
1,1,1-Trichloroethane	ND	2.00								
1,1,2-Trichloroethane	ND	2.00								
Trichloroethene (TCE)	ND	2.00								
Trichlorofluoromethane	ND	2.00								
1,2,3-Trichloropropane	ND	2.00								
Vinyl chloride	ND	2.00								
Xylenes, Total	ND	2.00								
Surr: 1,2-Dichloroethane-d4	10.2		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10.2		10.00		102	70	130			
Surr: Dibromofluoromethane	10.1		10.00		101	70	130			
Surr: Toluene-d8	9.98		10.00		99.8	70	130			

Sample ID	LCS-27629		SampType:	LCS		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	LCSS		Batch ID:	27629		RunNo:	37389			
Prep Date:	9/21/2016		Analysis Date:	9/21/2016		SeqNo:	1162061	Units:	µg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.90	2.00	10.00	0	99.0	70	130			
Toluene	9.97	2.00	10.00	0	99.7	70	130			
Chlorobenzene	10.1	2.00	10.00	0	101	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	LCS-27629		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 27629		RunNo: 37389					
Prep Date:	9/21/2016		Analysis Date: 9/21/2016		SeqNo: 1162061		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	9.83	2.00	10.00	0	98.3	68	129			
Trichloroethene (TCE)	9.94	2.00	10.00	0	99.4	70	130			
Surr: 1,2-Dichloroethane-d4	10.4		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10.2		10.00		102	70	130			
Surr: Dibromofluoromethane	10.3		10.00		103	70	130			
Surr: Toluene-d8	9.91		10.00		99.1	70	130			

Sample ID	LCSD-27629		SampType: LCSD		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS02		Batch ID: 27629		RunNo: 37389					
Prep Date:	9/21/2016		Analysis Date: 9/21/2016		SeqNo: 1162068		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	10.1	2.00	10.00	0	101	70	130	1.80	20	
Toluene	10.0	2.00	10.00	0	100	70	130	0.600	20	
Chlorobenzene	10.1	2.00	10.00	0	101	70	130	0.199	20	
1,1-Dichloroethene	9.92	2.00	10.00	0	99.2	68	129	0.911	20	
Trichloroethene (TCE)	10.0	2.00	10.00	0	100	70	130	0.802	20	
Surr: 1,2-Dichloroethane-d4	10.5		10.00		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	10.0		10.00		100	70	130	0	0	
Surr: Dibromofluoromethane	10.2		10.00		102	70	130	0	0	
Surr: Toluene-d8	9.88		10.00		98.8	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#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	mb-27700	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	27700	RunNo:	37545					
Prep Date:	9/26/2016	Analysis Date:	9/28/2016	SeqNo:	1168037	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	0.11	0.50								J
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	0.077	0.40								J
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.40								
2,4-Dinitrophenol	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	mb-27700	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	27700	RunNo:	37545					
Prep Date:	9/26/2016	Analysis Date:	9/28/2016	SeqNo:	1168037	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.40								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.40								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.40								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.40								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2-Fluorophenol	2.6		3.330		77.4	35	97.9			
Surr: Phenol-d5	2.5		3.330		74.9	37.3	105			
Surr: 2,4,6-Tribromophenol	2.6		3.330		77.8	35.6	118			
Surr: Nitrobenzene-d5	1.0		1.670		62.6	41.2	107			
Surr: 2-Fluorobiphenyl	1.1		1.670		65.3	41.9	119			
Surr: 4-Terphenyl-d14	0.90		1.670		53.9	15	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	Ics-27700		SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSS		Batch ID: 27700			RunNo: 37577				
Prep Date:	9/26/2016		Analysis Date: 9/29/2016			SeqNo: 1169435		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.20	1.670	0	99.8	45.8	99.8			S
4-Chloro-3-methylphenol	3.3	0.50	3.330	0	99.1	51.5	103			
2-Chlorophenol	3.2	0.20	3.330	0	96.3	46.5	105			
1,4-Dichlorobenzene	1.6	0.20	1.670	0	98.8	45.5	103			
2,4-Dinitrotoluene	1.6	0.50	1.670	0	92.9	36	87.2			S
N-Nitrosodi-n-propylamine	1.6	0.20	1.670	0	94.1	47.3	104			
4-Nitrophenol	3.1	0.25	3.330	0	93.5	47.3	95.3			
Pentachlorophenol	3.1	0.40	3.330	0	91.8	38.7	89.3			S
Phenol	3.5	0.20	3.330	0	105	47.8	106			
Pyrene	1.7	0.20	1.670	0	101	33.4	105			
1,2,4-Trichlorobenzene	1.7	0.20	1.670	0	103	50.4	115			
Surr: 2-Fluorophenol	2.8		3.330		84.3	35	97.9			
Surr: Phenol-d5	3.0		3.330		91.3	37.3	105			
Surr: 2,4,6-Tribromophenol	3.0		3.330		91.2	35.6	118			
Surr: Nitrobenzene-d5	1.3		1.670		77.5	41.2	107			
Surr: 2-Fluorobiphenyl	1.3		1.670		78.5	41.9	119			
Surr: 4-Terphenyl-d14	1.2		1.670		68.9	15	132			

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#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	MB-27628		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 27628		RunNo: 37428					
Prep Date:	9/21/2016		Analysis Date: 9/22/2016		SeqNo: 1163395		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-27628		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 27628		RunNo: 37428					
Prep Date:	9/21/2016		Analysis Date: 9/22/2016		SeqNo: 1163396		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.8	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	MB-27620		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 27620		RunNo: 37419					
Prep Date:	9/21/2016		Analysis Date: 9/23/2016		SeqNo: 1163026		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	0.48	2.5								J

Sample ID	LCS-27620		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 27620		RunNo: 37419					
Prep Date:	9/21/2016		Analysis Date: 9/23/2016		SeqNo: 1163027		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	21	2.5	25.00	0	83.9	80	120			
Arsenic	21	2.5	25.00	0	85.5	80	120			
Barium	21	0.10	25.00	0	84.7	80	120			
Beryllium	22	0.15	25.00	0	88.7	80	120			
Cadmium	21	0.10	25.00	0	84.9	80	120			
Chromium	21	0.30	25.00	0	84.5	80	120			
Cobalt	20	0.30	25.00	0	81.9	80	120			
Lead	21	0.25	25.00	0	82.3	80	120			
Nickel	21	0.50	25.00	0	82.2	80	120			
Selenium	21	2.5	25.00	0	85.8	80	120			
Silver	4.3	0.25	5.000	0	86.3	80	120			
Vanadium	22	2.5	25.00	0	89.5	80	120			
Zinc	21	2.5	25.00	0	82.7	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609A18

26-Oct-16

Client: Western Refining Southwest, Gallup

Project: TANK T-714

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	W37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159468	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.7	62.9	123			
Surr: BFB	490		500.0		97.3	70	130			

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	W37308	RunNo:	37308					
Prep Date:		Analysis Date:	9/19/2016	SeqNo:	1159469	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.93	5.0								J
Surr: BFB	510		500.0		103	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
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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: 1609A18

RcptNo: 1

Received by/date:	AF 09/16/16		
Logged By:	Anne Thorne	9/16/2016 2:00:00 PM	Anne Thorne
Completed By:	Anne Thorne	9/19/2016	Anne Thorne
Reviewed By:	aJ	09/19/16	

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 ☐ | |
| 13. Are matrices correctly identified on Chain of Custody? | Yes ☒ | No ☐ | |
| 14. Is it clear what analyses were requested? | Yes ☒ | No ☐ | |
| 15. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes ☒ | No ☐ | |

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

Appendix E

Photographs during Remediation

















2016/09/14



2016/09/14

Section 13. Disposal considerations

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	NA1993	Not regulated.	Not regulated.
UN proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (Distillates (petroleum), heavy catalytic cracked)	-	-
Transport hazard class(es)	3	-	-
Packing group	III	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

AERG : 128

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** This material is listed or exempted.
United States inventory (TSCA 8b): This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Section 15. Regulatory information

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), heavy catalytic cracked	100	No.	No.	No.	No.	Yes.

State regulations

Massachusetts : This material is not listed.

New York : This material is not listed.

New Jersey : This material is not listed.

Pennsylvania : This material is not listed.

California Prop. 65

No products were found.

International regulations

International lists : **Australia inventory (AICS)**: This material is listed or exempted.
China inventory (IECSC): This material is listed or exempted.
Japan inventory: Not determined.
Korea inventory: This material is listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

Section 16. Other information

History

Date of issue mm/dd/yyyy : 07/31/2014

Date of previous issue : 05/15/2013

Version : 3

Revised Section(s) : 8, 16.

Prepared by : KMK Regulatory Services Inc.

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



2016-02-09



2016-02-09



2016-02-09



2016-02-09



2016-02-09



2016-02-09



2016-02-09



2016-02-09

RESPONSE ACTION REPORT
Tank T-714 – FCC Feed Release
February 5, 2016



Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico
EPA ID# NMD000333211

January 2017

Tracy Payne
Senior Geologist



DiSorbo
Environmental Consulting Firm

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Response Action Report Checklist – Tank T-714

Included	NA	
☒	☐	Title Page
☒	☐	Executive Summary
☒	☐	Report Checklist
☒	☐	Table of Contents
☒	☐	Section 1 - Introduction
☒	☐	General information about Gallup Refinery and Area of Release
☒	☐	Description of the Release
☒	☐	Characterization of Released Material
☒	☐	o Discussion of the Unit / Process / Area of Release (as applicable)
☒	☐	o Location of unit(s) on a topographic map of appropriate scale
☒	☐	o Designation of type and function of unit(s)
☒	☐	o General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings)
☒	☐	o Dates that the unit(s) was operated;
☐	☒	o Specifications of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous waste or hazardous constituents in the wastes
☒	☐	o All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include ground water data, soil analyses, air, and surface water data).
☒	☐	Site Conditions That Affected Release
☒	☐	Section 2 - Remediation Activities
☒	☐	Detailed discussion of remediation, what type of cleanup conducted, where was it conducted (GPS coordinates or measurements to physical site features), dimensions of excavation, volumes of remediation waste, characterization sampling, disposition of wastes
☒	☐	Soil Sampling – detailed discussion of sample collection and analysis
☒	☐	Soil Field Screening
☒	☐	Subsurface soil sampling – detailed discussion on soil borings, sampling and analysis
☒	☐	Groundwater Conditions – detailed discussion well installation and groundwater sample collection and analysis
☒	☐	Section 3 – Regulatory Criteria Comparisons
☒	☐	Presentation of applicable regulatory screening criteria and comparison to site concentrations.
☒	☐	Section 4 – Conclusions and Recommendations - NMED Concurrence – No Further Action Required - Deferral – Release Area within Existing SWMU / AOC - Possible consideration for SWMU Assessment Report
☒	☐	Tables – Soil and/or Groundwater Data
☒	☐	Figures - Figure – Affected Area - Topo Map ☒ Figure - Area Affected by Release – Aerial Photo ☒ Figure - Aerial Photo – Tank – Unit – Process Area ☒ Figure - Extent of Excavation Activities

		☒ Figure - Sampling Locations (Soil, Wells, Surface Water)
☒	☐	Appendices
☒	☐	• Appendix – Analytical
☒	☐	• Appendix – Photos
☒	☐	• Appendix – Waste Manifests
☐	☒	• Appendix – Calculations for Reportable Quantities
☒	☐	• Appendix – Form C-141 Release Notification and Corrective Action
☒	☐	• Appendix – Boring Logs/Monitoring Well Completion Logs
☒	☐	• Appendix – Standard Operating Procedures
☒	☐	• Appendix – Field Methods / Sampling Procedures

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Appendices

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- Appendix B Photographs of Release
- Appendix C Safety Data Sheet – FCC Feed
- Appendix D Analytical Data Reports
- Appendix E Photographs During Remediation and Sampling
- Appendix F Waste Profile Sheet and Waste Manifests
- Appendix G Field Methods
- Appendix H Soil Sampling Logs
-

Executive Summary

The Gallup Refinery is located 17 miles east of Gallup, New Mexico. This Response Action Report provides the details and data for a FCC Feed release from Tank T-714 on February 5, 2016.

Soil was excavated from the spill area. Soil confirmation samples were collected and analyzed for volatile organics, total petroleum hydrocarbons, semivolatile organics and metals.

The soil confirmation samples collected from the spill area were reported to contain concentrations that exceed the screening levels. The following constituents exceeded the screening levels:

- Total Petroleum Hydrocarbons – Diesel Range Organics;
- Arsenic;
- 1,2,4-Trimethylbenzene;
- 1,3,5-Trimethylbenzene;
- 1-Methylnaphthalene;
- 2-Hexanone;
- 2-Methylnaphthalene;
- Acetone; and
- Naphthalene.

Section 1

Introduction

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery property covers approximately 810 acres. Figure 1 presents the location of the Tank T-714 in the eastern portion of the refinery property. Figure 2 presents an aerial photograph of Tank T-714.

1.1 General Information

The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck. Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, sulfur recovery, mercox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

1.2 Discussion of the Release

At approximately 4:15 am on February 5, 2016 Tank T-714 was found to be overflowing. An investigation concluded that on the previous day, February 4, 2016, during the 6 am to 6 pm shift, the Pumper Technician did not recognize or document that the tank was in the red zone. The red zone procedure states the red zone starts at 85% or 5 feet of safe fill height. Once a tank is in the red zone, the tank must be hand gauged every half hour. Neither the day or night pumper realized the tank was in the red zone so the procedure was not followed, and no hand gauge was ever taken. The onsite Fire Department sprayed a blanket of foam and water over the entire affected area in order to prevent any potential hazards associated with the overflow. The Environmental Department arrived at the scene at 06:15 hours, February 5th to assess the release. A contract vacuum truck began removing liquids until further assessment could be determined. The FCC Feed was contained within an earthen dike containment area of the Hot Oil Tank Farm.

The FCC feed rundown meter was used to determine the volume that was released. Assuming the worst case, the volume was 1,543 barrels of FCC feed.

Notification of the spill was provided to the NMED Hazardous Waste Bureau and the Oil Conservation Division on February 5, 2016 at 06:54. An initial written report (Form C-141) was completed on February 19, 2016, for this release and is provided in Appendix A. Photographs of the release are included in Appendix B.

1.3 Characterization of the Release Material

The product released to the ground consisted of FCC Feed. A copy of the Safety Data Sheet for FCC Feed is included in Appendix C.

1.4 Discussion of the Process Area

The diameter of Tank T-714 is 73 feet 4 inches. The tank is a vertical, steel tank that was built in 1969. The tank has a height of 40 feet and is able to hold 30,000 barrels of FCC Feed. The external shell of the tank was inspected in December 2015 and is scheduled for re-inspection in December 2020. Tank T-714 is fed by pipeline from the crude unit secondary column bottoms and flow from T-714 goes by pipeline to the FCC unit.

1.5 Site Conditions That Affect the Release

Local site topographic features include high ground in the southeast gradually decreasing to lowland fluvial plain in the northwest. Elevations on the refinery property range from 7,040 feet to 6,860 feet. Tank T-714 is at an approximate elevation of 6,970 feet above mean sea level (msl) and is located within a diked tank farm. Photographs are included in this report and show the land surface in the immediate area. The release was contained within the tank dike.

Section 2

Remediation Activities

2.1 Remediation

The remediation of the FCC Feed release from Tank T-714 consisted of the initial remediation and two subsequent soil excavation events. Field screening (e.g., visual and olfactory) was conducted during the events to determine the extent of the remediation. The final remediation decisions are based on the laboratory analytical results and not the results of field screening.

2.1.1 Initial Remediation

Contract personnel were called out to vacuum the liquids until further assessment could be determined. After an assessment of the spilled area, a contract company determined that in-situ solidification of the spilled area would be necessary using non-contaminated dirt. A contract company arrived on Monday, February 8th, and began the solidification process. The in-situ solidification process was not successful because the spilled material would not solidify in-situ but would move to other areas. Photographs are included in Appendix B.

The cleanup strategy was modified to solidification in roll-off boxes. An initial sample was collected on February 8, 2016 from 3 roll-off boxes (45 cubic yards) and submitted to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis. Analytical Report No. 1602354 was issued on February 17, 2016 and is included in Appendix D.

As of February 19, 2016 the contract company filled about 30 roll-off boxes with FCC Feed product / soil mixture. Redrock Landfill requires analysis for each 100 yards of material. On February 16, 2016, four composite samples were collected from 12 additional roll-off boxes (180 cubic yards) and submitted to HEAL on February 17, 2016. Analytical Report No. 1602734 was issued on March 1, 2016 and is included in Appendix D.

The Redrock landfill requested additional analyses prior to shipment to determine to which area of the land farm the material has to be delivered. On March 1, 2016, four additional samples were collected and submitted to HEAL. Analytical Report No. 1603068 was issued on March 14, 2016 and is included in Appendix D. The 15 roll-off boxes held 220.28 tons of material that was shipped to Redrock Landfill for land farming on March 23 through March 26, 2016.

Figure 3 depicts the extent of the soil contamination. The soil was excavated to a depth of approximately 12 inches. The soils that were located within the extent of visible soil contamination were excavated. Figure 4 depicts the extent of the soil excavation. Photographs during remediation are included in Appendix E. A copy of the waste profile sheet and the waste manifests are included in Appendix F. In addition to the materials sent to the Redrock Facility, approximately 1,363.47 tons of non-hazardous contaminated soil was shipped to Painted Desert Landfill in Joseph City, Arizona.

2.1.2 Additional Remediation - August 10, 2016

Additional soil excavation was conducted on August 10, 2016 in the area of the original soil sample T-714-1. The Diesel Range Organics concentration (5,900 mg/kg) and Motor Oil Range Organics concentration (7,300 mg/kg) detected in the original T-714-1 sample exceeded the Non-Residential Soil Screening Level (3,800 mg/kg). The soil was excavated an additional 12 inches to a total depth of approximately 24 inches. Approximately 22,580 pounds of soil were excavated and loaded into one roll-off box. The roll-off box was shipped to Gandy Marley, Inc. on September 9, 2016. Figure 4 depicts the extent of the soil excavation. A copy of the waste manifest is included in Appendix F.

2.1.3 Additional Remediation - August 31, 2016

Additional soil excavation was conducted on August 31, 2016 in the area of the soil sample T-714-2 that was collected on August 16, 2016. The Diesel Range Organics concentration (4,100 mg/kg) and Motor Oil Range Organics concentration (5,100 mg/kg) detected in sample T-714-2 exceeded the Non-Residential Soil Screening Level (3,800 mg/kg). Approximately 12 inches of soil was removed, bringing the total maximum depth to approximately 36 inches. Approximately 19,480 pounds of soil were excavated and loaded into one roll-off box. The roll-off box was shipped to Gandy Marley, Inc. on October 27, 2016. Figure 4 depicts the extent of the soil excavation. A copy of the waste manifest is included in Appendix F.

2.2 Assessment – Soil Confirmation Sampling Event No. 1

2.2.1 Soil Sampling

On June 14, 2016, nine discrete soil samples, T-714-1 through T-714-9 were collected from nine separate locations using a hand auger. The hand auger was used to collect a soil sample from 0 to 6 inches below ground level in the floor of the excavation. The hand auger was decontaminated between each location. Figure 4 depicts the locations of the nine soil samples. A copy of the field

methods used to collect the soil samples is included as Appendix G. Copies of the soil sampling logs are included in Appendix H.

2.2.2 Soil Screening Results

Soil samples were collected from locations based on field screening (e.g., olfactory, staining) and were considered to be the most representative of the soil conditions.

2.2.3 Soil Sampling Analytical Results

On June 15, 2016 soil samples T-714-1 through T-714-9 were delivered to HEAL. Each soil sample was analyzed for the following:

- Total Petroleum Hydrocarbons – EPA Method 8015D;
- Volatile Organics – EPA Method 8260B;
- Semivolatile Organics – EPA Method 8270B; and
- Skinner List Metals – EPA Method 6010B & 7470.

On July 26, 2016 HEAL issued Analytical Report No. 1606870. A copy of the report is provided in Appendix D. Table 1 provides a summary of the analytical results.

2.3 Assessment – Soil Confirmation Sampling Event No. 2

2.3.1 Soil Sampling

On August 16, 2016, after additional excavation was conducted in the area of original sample T-714-1, three discrete soil samples, T-714-1 through T-714-3 were collected from three separate locations. Figure 4 depicts the locations of the three soil samples. A copy of the field methods used to collect the soil samples is included as Appendix G. A copy of the soil sampling log is included in Appendix H.

2.3.2 Soil Screening Results

Soil samples were collected from locations based on field screening (e.g., olfactory, staining) and were considered to be the most representative of the soil conditions.

2.3.3 Soil Sampling Analytical Results

On August 19, 2016 soil samples T-714-1 through T-714-3 were delivered to HEAL. Each soil sample was analyzed for the following:

-
-
- Total Petroleum Hydrocarbons – EPA Method 8015D;
 - Volatile Organics – EPA Method 8260B;
 - Semivolatile Organics – EPA Method 8270B; and
 - Anions – EPA Method 300.0

On August 26, 2016 HEAL issued Analytical Report No. 1608B86. A copy of the report is provided in Appendix D. Table 2 provides a summary of the analytical results.

2.4 Assessment – Soil Confirmation Sampling Event No. 3

2.4.1 Soil Sampling

On September 16, 2016, one discrete soil sample, T-714-A was collected after additional excavation was completed in the area of sample T-714-2 (collected on August 19, 2016). Figure 4 depicts the location of the soil sample. A copy of the field methods used to collect the soil sample is included as Appendix G. A copy of the soil sampling log is included in Appendix H.

2.4.2 Soil Screening Results

The soil sample was collected from the location based on field screening (e.g., olfactory, staining) and was considered to be the most representative of the soil conditions.

2.4.3 Soil Sampling Analytical Results

On September 16, 2016 soil sample T-714-A was delivered to HEAL. The soil sample was analyzed for the following:

- Total Petroleum Hydrocarbons – EPA Method 8015D;
- Volatile Organics – EPA Method 8260B;
- Semivolatile Organics – EPA Method 8270B; and
- Skinner List Metals – EPA Method 6010B & 7470.

On October 26, 2016 HEAL issued Analytical Report No. 1609A18. A copy of the report is provided in Appendix D. Table 3 provides a summary of the analytical results.

2.5 Subsurface Soil Conditions

No soil borings or monitor wells were installed during the investigation.

2.6 Groundwater Conditions

A groundwater investigation was not conducted. There are currently no groundwater monitoring wells in the immediate area of Tank T-714. The nearest monitor well to Tank T-714 is MKTF-37 which is approximately 900 feet northwest of the release area. The depth to groundwater in this well is approximately 7 feet below ground level.

2.7 Surface Water Conditions

The release did not reach surface water.

2.8 Surface Air and Subsurface Vapor Conditions

A vapor release was not associated with this release.

Section 3

Regulatory Criteria Comparisons

The potential cleanup levels (i.e., screening levels) are specified in NMED's *Risk Assessment Guidance for Site Investigations and Remediation* dated July 2015 and in the Environmental Protection Agency's (EPA) Regional Screening Levels dated June 2015 if NMED values are not available.

For non-residential properties (e.g., the Gallup Refinery), the soil screening levels (SSLs) must be protective of commercial/industrial workers throughout the upper one foot of surface soils and construction workers throughout the upper ten feet based on NMED criteria. NMED residential soil screening levels are applied to the upper ten feet and soil screening levels for protection of groundwater apply throughout the vadose zone. EPA soil screening levels for direct contact exposure apply to the upper two feet of the vadose zone. The cleanup criteria are shown on the analytical summary tables.

A review of the analytical results for the following soil samples collected on June 14, 2016 reported that the arsenic concentrations detected exceeded the Risk Based SSL for a DAF of 20 (0.299 mg/kg).

- T-714-1 (0 – 6") – 2.1 mg/kg;
- T-714-2 (0 – 6") – 1.3 mg/kg;
- T-714-3 (0 – 6") – 2.4 mg/kg;
- T-714-4 (0 – 6") – 2.1 mg/kg;
- T-714-6 (0 – 6") – 2.2 mg/kg; and
- T-714-7 (0 – 6") – 1.7 mg/kg.

A review of the analytical results for the soil sample T-714-A (0 – 6") collected on September 14, 2016 reported that the arsenic and cyanide concentrations detected exceeded the Risk Based SSL for a DAF of 20.

- Arsenic – 1.6 mg/kg – (Risk Based SSL DAF of 20 - 0.299 mg/kg); and
- Cyanide – 1.04 mg/kg – (Risk Based SSL DAF of 20 - 0.005 mg/kg).

Section 4

Conclusions and Recommendations

The FCC Tank T-714 overflowed on Friday, February 5, 2016 in the Hot Oil Tank Farm. All liquid was contained within an earthen dike within the tank farm. Valves were blocked in and product was rerouted to Tank T-701. Worst case estimate was 1,543 barrels of FCC Feed was spilled to the ground surface.

4.1 Soil Confirmation Sampling Results

A review of the analytical results for the following soil samples collected on June 14, 2016 reported that the arsenic concentrations detected exceeded the Risk Based SSL for a DAF of 20 (0.299 mg/kg).

- T-714-1 (0 – 6”) – 2.1 mg/kg;
- T-714-2 (0 – 6”) – 1.3 mg/kg;
- T-714-3 (0 – 6”) – 2.4 mg/kg;
- T-714-4 (0 – 6”) – 2.1 mg/kg;
- T-714-6 (0 – 6”) – 2.2 mg/kg; and
- T-714-7 (0 – 6”) – 1.7 mg/kg.

A review of the analytical results for the soil sample T-714-A (0 – 6”) collected on September 14, 2016 reported that the arsenic and cyanide concentrations detected exceeded the Risk Based SSL for a DAF of 20.

- Arsenic – 1.6 mg/kg – (Risk Based SSL DAF of 20 - 0.299 mg/kg); and
- Cyanide – 1.04 mg/kg – (Risk Based SSL DAF of 20 - 0.005 mg/kg).

4.2 Recommended Additional Excavation and Assessment

The reported concentrations for arsenic did exceed the Risk Based SSL for a DAF of 20, but are very low and are most likely reflective of naturally occurring concentrations. The cyanide exceedance was also low and was only reported in one of the ten soil confirmation samples collected and analyzed for cyanide. This anomaly is not attributed to the spill event. These exceedances at the near surface

are unlikely to pose a threat to groundwater resources. No further action is recommended for this area.

Tables

Table 1	Soil Analytical Results – June 14, 2016
Table 2	Soil Analytical Results – August 16, 2016
Table 3	Soil Analytical Results – September 14, 2016

Table 1
Soil Analytical Results - June 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (0-6")	T-714-2 (0-6")	T-714-3 (0-6")	T-714-4 (0-6")	T-714-5 (0-6")	T-714-6 (0-6")	T-714-7 (0-6")	T-714-8 (0-6")	T-714-9 (0-6")
Hall Environmental Analytical Lab ID							1606870-001	1606870-002	1606870-003	1606870-004	1606870-005	1606870-006	1606870-007	1606870-008	1606870-009
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
EPA Method 8015D - mg/kg															
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	5900	2500	140	110	290	1100	2500	1600	1900
Gasoline Range Organics (GRO)	-	-	-	-	-	-	<0.65	<0.82	<0.60	<0.68	<0.71	<0.69	<0.65	0.89 J	<0.71
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	7300	3700	210	160	520	1200	2500	3000	2100
EPA Method 7470 mg/kg															
Mercury	2.38E+01	(1)	2.07E+01	(5)	6.54E-01	(8)	0.015 J	0.057	0.32	0.43	0.35	0.40	0.036	0.0046	0.075
EPA Method 6010B Soil Metals - mg/kg															
Antimony	3.13E+01	(1)	1.42E+02	(5)	6.56E+00	(8)	<2.3	<1.2	<2.3	<0.12	<23	<1.2	<1.2	<1.2	<1.2
Arsenic	4.25E+00	(1)	2.15E+01	(4)	2.99E-01	(8)	2.1 J	1.3 J	2.4	2.1	<14	2.2 J	1.7 J	<1.4	<1.5
Barium	1.56E+04	(1)	4.35E+03	(5)	2.70E+03	(8)	330	710	780	710	510	820	590	310	390
Beryllium	1.56E+02	(1)	1.48E+02	(5)	1.96E+02	(8)	0.67	0.67	0.47	0.50	0.41	0.53	0.53	0.49	0.46
Cadmium	7.05E+01	(1)	7.21E+01	(5)	9.39E+00	(8)	<0.13	0.092 J	<0.13	<0.063	<1.3	<0.063	<0.062	<0.063	<0.064
Chromium	9.66E+01	(1)	1.34E+02	(5)	2.01E+05	(8)	8.4	8.1	5.4	6.9	4.5	7.8	5.5	4.2	7.7
Cobalt	2.30E+01	(2)	3.50E+02	(6)	5.40E+00	(9)	3.7	3.7	3.1	3.0	3.5	3.2	2.8	2.3	2.8
Lead	4.00E+02	(1)	8.00E+02	(4)	2.80E+02	(10)	5.0	8.8	6.4	3.9	8.8	6.1	2.9	5.2	7.4
Nickel	1.56E+03	(1)	6.19E+03	(5)	4.85E+02	(8)	6.6	6.9	6.0	5.8	5.7	7.4	5.0	4.0	4.9
Selenium	3.91E+02	(1)	1.75E+03	(5)	1.02E-01	(8)	<2.2	<1.1	<2.2	<1.1	<22	<1.1	<1.1	<1.1	<1.1
Silver	3.91E+02	(1)	1.77E+03	(5)	1.38E+01	(8)	<0.063	<0.032	<0.063	<0.032	<0.63	<0.032	<0.031	<0.031	<0.032
Vanadium	3.94E+02	(1)	6.14E+02	(5)	1.26E+03	(8)	16	15	16	17	14	19	13	10	14
Zinc	2.35E+04	(1)	1.06E+05	(5)	7.41E+03	(8)	17	23	14	17	14	18	9.6	9.0	14
EPA Method 335.4 - mg/kg															
Cyanide	1.12E+01	(1)	1.21E+01	(5)	5.22E-03	(8)	<0.253	<0.255	<0.271	<0.239	<0.226	<0.237	<0.225	<0.243	<0.257
EPA Method 8260B - mg/kg															
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E-01	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,1,2,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.000271	<0.000306	<0.000246	<0.000270	<0.000338	<0.000389	<0.000263	<0.000266	<0.000336
1,1-Dichloropropene	-	-	-	-	-	-	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.000401	<0.000452	<0.000363	<0.000398	<0.000500	<0.000575	<0.000389	<0.000392	<0.000496
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.000502	<0.000567	<0.000455	<0.000499	<0.000626	<0.000721	<0.000487	<0.000492	<0.000622
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	0.0129	0.00398	<0.000254	<0.000279	0.000630 J	<0.000403	0.00259	0.000430 J	<0.000348
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.000176	<0.000199	<0.000160	<0.000175	<0.000220	<0.000253	<0.000171	<0.000173	<0.000218
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E-00	(8)	<0.000241	<0.000272	<0.000218	<0.000240	<0.000301	<0.000346	<0.000234	<0.000236	<0.000299
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	0.00422	0.00132 J	<0.000248	<0.000272	<0.000341	<0.000392	0.000586 J	<0.000268	<0.000338
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.000306	<0.000345	<0.000277	<0.000304	<0.000381	<0.000439	<0.000297	<0.000300	<0.000379
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.000310	<0.000350	<0.000281	<0.000308	<0.000387	<0.000445	<0.000301	<0.000304	<0.000384
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	0.0893 E	0.0205	<0.000171	<0.000187	<0.000235	0.00378 J	0.0267	0.00183 J	0.0058
2,2-Dichloropropane	-	-	-	-	-	-	<0.000209	<0.000236	<0.000189	<0.000208	<0.000261	<0.000300	<0.000203	<0.000205	<0.000259
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	0.00826 J	0.00256 J	<0.000541	<0.000594	0.00190 J	<0.000857	0.00190 J	0.0133	0.0193
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.000282	<0.000318	<0.000255	<0.000280	<0.000351	<0.000404	<0.000273	<0.000276	<0.000349
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.000454	<0.000465	<0.000374	<0.000410	<0.000514	<0.000592	<0.000400	<0.000404	<0.00455 J
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	0.0828 E	0.0194	<0.000395	<0.000433	<0.000544	0.00145 J	0.0253	0.00183 J	0.00564

Table 1
Soil Analytical Results - June 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (0-6")	T-714-2 (0-6")	T-714-3 (0-6")	T-714-4 (0-6")	T-714-5 (0-6")	T-714-6 (0-6")	T-714-7 (0-6")	T-714-8 (0-6")	T-714-9 (0-6")
Hall Environmental Analytical Lab ID							1606870-001	1606870-002	1606870-003	1606870-004	1606870-005	1606870-006	1606870-007	1606870-008	1606870-009
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
4-Chlorotoluene	-	-	-	-	-	-	<0.000275	<0.000311	<0.000249	<0.000274	<0.000343	<0.000395	<0.000267	<0.000270	<0.000341
4-Isopropyltoluene	-	-	-	-	-	-	0.00229	<0.000351	<0.000281	<0.000309	<0.000387	<0.000446	0.000386 J	<0.000304	<0.000385
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.00331	<0.00374	<0.00300	<0.00329	<0.00413	<0.00475	<0.00321	<0.00324	<0.00410
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	0.0478	0.0232	0.0131	0.0145	0.0168	0.0106 J	0.0129	0.0982	0.0910
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.000168	<0.000190	<0.000153	<0.000167	<0.000210	<0.000242	<0.000163	<0.000165	<0.000209
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	<0.000298	<0.000336	<0.000270	<0.000296	<0.000372	<0.000428	<0.000289	<0.000292	<0.000369
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.000612	<0.000691	<0.000555	<0.000609	<0.000764	<0.000879	<0.000594	<0.000600	<0.000758
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.000190	<0.000214	<0.000172	<0.000189	<0.000237	<0.000273	<0.000184	<0.000186	<0.000235
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.000306	<0.000345	<0.000277	<0.000304	<0.000381	<0.000439	<0.000297	<0.000299	<0.000379
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.000419	<0.000473	<0.000380	<0.000417	<0.000523	<0.000602	<0.000407	<0.000411	<0.000520
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.000967	<0.00109	<0.000876	<0.000961	<0.00121	<0.00139	<0.000938	<0.000947	<0.00120
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	<0.000223	<0.000251	<0.000202	<0.000221	<0.000278	<0.000319	<0.000216	<0.000218	<0.000276
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.000377	<0.000426	<0.000342	<0.000375	<0.000471	<0.000542	<0.000366	<0.000370	<0.000468
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	<0.000208	<0.000235	<0.000189	<0.000207	<0.000260	<0.000299	<0.000202	<0.000204	<0.000258
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.000278	<0.000314	<0.000252	<0.000277	<0.000347	<0.000399	<0.000270	<0.000272	<0.000345
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	0.0203	0.00508	<0.00150	<0.00165	<0.00207	<0.00238	0.00601	<0.00162	<0.00205
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	0.00328	<0.000455	<0.000365	<0.000401	<0.000503	<0.000579	0.000683 J	<0.000395	<0.000499
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	0.000571 J	<0.000335	<0.000269	<0.000295	<0.000370	<0.000426	<0.000288	<0.000290	<0.000367
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	0.00207	<0.000332	<0.000266	<0.000292	<0.000367	<0.000422	<0.000285	<0.000288	<0.000364
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.000212	<0.000239	<0.000192	<0.000210	<0.000264	<0.000304	<0.000205	<0.000207	<0.000262
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.000242	<0.000273	<0.000219	<0.000241	<0.000302	<0.000347	<0.000235	<0.000237	<0.000300
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.000218	<0.000245	<0.000197	<0.000216	<0.000271	<0.000312	<0.000211	<0.000213	<0.000269
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	0.00171	0.000738 J	0.000592 J	0.000543 J	0.00134 J	0.000523 J	0.000402 J	0.000276 J	0.000667 J
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.000167	<0.000189	<0.000152	<0.000166	<0.000209	<0.000240	<0.000162	<0.000164	<0.000207
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.000200	<0.000226	<0.000182	<0.000199	<0.000250	<0.000288	<0.000194	<0.000196	<0.000248
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<0.00166	<0.00187	<0.00150	<0.00165	<0.00207	<0.00238	<0.00161	<0.00162	<0.00205
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.000208	<0.000235	<0.000188	<0.000207	<0.000260	<0.000299	<0.000202	<0.000204	<0.000258
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.000436	<0.000491	<0.000395	<0.000433	<0.000543	<0.000625	<0.000423	<0.000427	<0.000539
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	0.00106 J	<0.000745	<0.000598	<0.000656	<0.000823	<0.000947	<0.000640	<0.000646	<0.000817
EPA Method 8270C - mg/kg ***															
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<11	<11	<11	<5.4	<4.3	<0.43	<0.86	<11	<11
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<7.7	<7.6	<7.6	<3.8	<3.0	<0.30	<0.61	<7.6	<7.5
1,3-Dichlorobenzene	-	-	-	-	-	-	<7.7	<7.7	<7.7	<3.8	<3.1	<0.31	<0.61	<7.7	<7.6
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<8.5	<8.4	<8.4	<4.2	<3.3	<0.33	<0.67	<8.4	<8.3
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<10	<10	<10	<5.0	<4.0	<0.40	<0.80	<9.9	<9.9
2,4,5-Trichlorophenol	6.16E+03	(1)	2.69E+04	(5)	6.62E+01	(8)	<10	<10	<9.9	<5.0	<4.0	<0.40	<0.80	<9.9	<9.8
2,4,6-Trichlorophenol	6.16E+01	(1)	2.69E+02	(5)	6.74E-01	(8)	<8.3	<8.3	<8.2	<4.1	<3.3	<0.33	<0.66	<8.2	<8.2
2,4-Dichlorophenol	1.85E+02	(1)	8.07E+02	(5)	8.25E-01	(8)	<9.3	<9.3	<9.3	<4.6	<3.7	<0.37	<0.74	<9.2	<9.2

Table 1
Soil Analytical Results - June 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (0-6")	T-714-2 (0-6")	T-714-3 (0-6")	T-714-4 (0-6")	T-714-5 (0-6")	T-714-6 (0-6")	T-714-7 (0-6")	T-714-8 (0-6")	T-714-9 (0-6")
Hall Environmental Analytical Lab ID							1606870-001	1606870-002	1606870-003	1606870-004	1606870-005	1606870-006	1606870-007	1606870-008	1606870-009
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<11	<11	<11	<5.4	<4.3	<0.43	<0.86	<11	<11
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<6.6	<6.6	<6.6	<3.3	<2.6	<0.26	<0.53	<6.6	<6.5
2,4-Dinitrotoluene	1.71E+01	(1)	8.23E+01	(4)	4.91E-02	(8)	<8.9	<8.9	<8.9	<4.4	<3.5	<0.35	<0.71	<8.8	<8.8
2,6-Dinitrotoluene	3.56E+00	(1)	1.72E+01	(4)	1.02E-02	(8)	<11	<11	<11	<5.3	<4.2	<0.42	<0.84	<10	<10
2-Chloronaphthalene	6.26E+03	(1)	2.83E+04	(5)	5.70E+01	(8)	<7.9	<7.9	<7.8	<3.9	<3.1	<0.31	<0.63	<7.8	<7.7
2-Chlorophenol	3.91E+02	(1)	1.77E+03	(5)	1.15E+00	(8)	<7.9	<7.9	<7.8	<3.9	<3.1	<0.31	<0.63	<7.8	<7.8
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<12	<12	<12	<5.9	<4.7	<0.47	<0.94	<12	<12
1'-2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<8.4	<8.3	<8.3	<4.2	<3.3	<0.33	<0.66	<8.3	<8.2
2-Nitroaniline	6.30E+02	(2)	8.00E+03	(6)	1.60E+00	(9)	<11	<11	<11	<5.4	<4.3	<0.43	<0.86	<11	<11
2-Nitrophenol	-	-	-	-	-	-	<9.9	<9.9	<9.8	<4.9	<3.9	<0.39	<0.79	<9.8	<9.8
3,3'-Dichlorobenzidine	1.18E+01	(1)	5.70E+01	(4)	1.23E-01	(8)	<7.4	<7.4	<7.3	<3.7	<2.9	<0.29	<0.58	<7.3	<7.2
3+4-Methylphenol	-	-	-	-	-	-	<7.2	<7.2	<7.2	<3.6	<2.9	<0.29	<0.58	<7.2	<7.1
3-Nitroaniline	-	-	-	-	-	-	<8.8	<8.8	<8.7	<4.4	<3.5	<0.35	<0.70	<8.7	<8.7
4,6-Dinitro-2-methylphenol	4.93E+00	(1)	2.15E+01	(5)	3.94E-02	(8)	<6.1	<6.0	<6.0	<3.0	<2.4	<0.24	<0.48	<6.0	<6.0
4-Bromophenyl phenyl ether	-	-	-	-	-	-	<9.6	<9.5	<9.5	<4.8	<3.8	<0.38	<0.76	<9.5	<9.4
4-Chloro-3-methylphenol	-	-	-	-	-	-	<12	<12	<12	<5.9	<4.7	<0.47	<0.95	<12	<12
4-Chloroaniline	2.70E+01	(3)	1.10E+02	(7)	3.20E-03	(9)	<11	<11	<11	<5.4	<4.3	<0.43	<0.86	<11	<11
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	<11	<11	<11	<5.7	<4.5	<0.45	<0.91	<11	<11
4-Nitroaniline	2.70E+02	(3)	1.10E+03	(7)	3.20E-02	(9)	<7.1	<7.0	<7.0	<3.5	<2.8	<0.28	<0.56	<7.0	<6.9
4-Nitrophenol	-	-	-	-	-	-	<7.6	<7.6	<7.6	<3.8	<3.0	<0.30	<0.61	<7.5	<7.5
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<8.6	<8.6	<8.5	<4.3	<3.4	<0.34	<0.68	<8.5	<8.4
Acenaphthylene	-	-	-	-	-	-	<8.1	<8.1	<8.1	<4.1	<3.2	<0.32	<0.65	<8.1	<8.0
Aniline	9.50E+02	(3)	4.00E+03	(7)	9.20E-02	(9)	<9.5	<9.4	<9.4	<4.7	<3.7	<0.37	<0.75	<9.4	<9.3
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<6.6	<6.6	<6.6	<3.3	<2.6	<0.26	<0.53	<6.6	<6.5
Azobenzene	5.60E+01	(3)	2.60E+02	(7)	1.84E+06	(9)	<12	<12	<12	<6.1	<4.8	<0.48	<0.97	<12	<12
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<8.6	<8.6	<8.5	<4.3	<3.4	<0.34	<0.68	<8.5	<8.5
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<7.6	<7.6	<7.5	<3.8	<3.0	<0.30	<0.60	<7.5	<7.5
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<9.0	<9.0	<9.0	<4.5	<3.6	<0.36	<0.72	<8.9	<8.9
Benzo(g,h,i)perylene	-	-	-	-	-	-	<8.8	<8.8	<8.8	<4.4	<3.5	<0.35	<0.70	<8.7	<8.7
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<8.8	<8.8	<8.7	<4.4	<3.5	<0.35	<0.70	<8.7	<8.7
Benzoic acid	2.50E+05	(2)	3.30E+06	(6)	3.60E+02	(9)	<8.3	<8.3	<8.2	<4.1	<3.3	<0.33	<0.66	<8.2	<8.2
Benzyl alcohol	6.30E+03	(2)	8.20E+04	(6)	9.60E+00	(9)	<7.8	<7.8	<7.8	<3.9	<3.1	<0.31	<0.62	<7.8	<7.7
Bis(2-chloroethoxy)methane	1.90E+02	(2)	2.50E+03	(6)	2.60E-01	(9)	<11	<11	<11	<5.4	<4.3	<0.43	<0.86	<11	<11
Bis(2-chloroethyl)ether	3.11E+00	(1)	1.95E+00	(5)	6.05E-04	(8)	<7.4	<7.3	<7.3	<3.7	<2.9	<0.29	<0.58	<7.3	<7.2
Bis(2-chloroisopropyl)ether	9.93E+01	(1)	5.19E+02	(4)	4.73E-02	(8)	<8.9	<8.9	<8.9	<4.4	<3.5	<0.35	<0.71	<8.8	<8.8
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	<8.2	<8.1	<8.1	<4.1	<3.2	<0.32	<0.65	<8.1	<8.0
Butyl benzyl phthalate	2.90E+03	(3)	1.20E+04	(7)	4.60E+00	(9)	<8.9	<8.8	<8.8	<4.4	<3.5	<0.35	<0.70	<8.8	<8.7
Carbazole	-	-	-	-	-	-	<6.8	<6.7	<6.7	<3.4	<2.7	<0.27	<0.54	<6.7	<6.6
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<8.5	<8.5	<8.5	<4.2	<3.4	<0.34	<0.68	<8.4	<8.4
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<8.1	<8.1	<8.0	<4.0	<3.2	<0.32	<0.64	<8.0	<8.0
Dibenzofuran	-	-	-	-	-	-	<10	<10	<10	<5.0	<4.0	<0.40	<0.80	<10	<9.9
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	<10	<10	<10	<5.1	<4.0	<0.40	<0.81	<10	<10
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<9.8	<9.8	<9.7	<4.9	<3.9	<0.39	<0.78	<9.7	<9.6
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	<7.5	<7.5	<7.4	<3.7	<3.0	<0.30	<0.59	<7.4	<7.4
Di-n-octyl phthalate	-	-	-	-	-	-	<8.5	<8.5	<8.5	<4.2	<3.4	<0.34	<0.68	<8.4	<8.4
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<5.8	<5.8	<5.7	<2.9	<2.3	<0.23	<0.46	<5.7	<5.7
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	<9.2	<9.1	<9.1	<4.6	<3.6	<0.36	<0.73	<9.1	<9.0
Hexachlorobenzene	3.33E+00	(1)	1.60E+01	(4)	9.22E-02	(8)	<7.9	<7.9	<7.8	<3.9	<3.1	<0.31	<0.63	<7.8	<7.8

Table 1
Soil Analytical Results - June 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (0-6")	T-714-2 (0-6")	T-714-3 (0-6")	T-714-4 (0-6")	T-714-5 (0-6")	T-714-6 (0-6")	T-714-7 (0-6")	T-714-8 (0-6")	T-714-9 (0-6")
Hall Environmental Analytical Lab ID							1606870-001	1606870-002	1606870-003	1606870-004	1606870-005	1606870-006	1606870-007	1606870-008	1606870-009
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<11	<11	<11	<5.6	<4.5	<0.45	<0.90	<11	<11
Hexachlorocyclopentadiene	3.70E+02	(1)	8.67E+02	(5)	1.34E+00	(8)	<11	<11	<11	<5.7	<4.5	<0.45	<0.91	<11	<11
Hexachloroethane	4.31E+01	(1)	1.88E+02	(5)	6.62E-02	(8)	<8.6	<8.6	<8.5	<4.3	<3.4	<0.34	<0.68	<8.5	<8.5
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<7.8	<7.8	<7.7	<3.9	<3.1	<0.31	<0.62	<7.7	<7.7
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<9.6	<9.6	<9.5	<4.8	<3.8	<0.38	<0.76	<9.5	<9.4
Nitrobenzene	6.04E+01	(1)	2.93E+02	(4)	1.44E-02	(8)	<10	<10	<10	<5.1	<4.1	<0.41	<0.82	<10	<10
N-Nitrosodi-n-propylamine	7.80E-01	(3)	3.30E+00	(7)	1.62E-04	(9)	<9.6	<9.6	<9.5	<4.8	<3.8	<0.38	<0.76	<9.5	<9.5
N-Nitrosodiphenylamine	7.94E-03	(1)	1.71E-01	(4)	9.84E-06	(8)	<9.8	<9.7	<9.7	<4.9	<3.9	<0.39	<0.78	<9.7	<9.6
Pentachlorophenol	9.85E+00	(1)	4.45E+01	(4)	6.08E-02	(8)	<6.4	<6.4	<6.4	<3.2	<2.5	<0.25	<0.51	<6.4	<6.3
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	<6.8	<6.8	<6.7	<3.4	<2.7	<0.27	<0.54	<6.7	<6.7
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	<7.5	<7.5	<7.5	<3.8	<3.0	<0.30	<0.60	<7.5	<7.4
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<7.6	<7.5	<7.5	<3.8	<3.0	<0.30	<0.60	<7.5	<7.4
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<7.9	<7.9	<7.9	<3.9	<3.1	<0.31	<0.63	<7.8	<7.8

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013

RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA

Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Laboratory data flags

J - Analyte detected below quantitation limits

E - Value above quantitation limits

EPA Method 8270C - mg/kg *** - All data was flagged with "D" - Sample diluted due to matrix

Table 2
Soil Analytical Results - August 16, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (4-6")	T-714-2 (4-6")	T-714-3 (4-6")
Hall Environmental Analytical Lab ID							1608B86-001	1608B86-002	1608B86-003
Sample Date							8/16/2016	8/16/2016	8/16/2016
EPA Method 8015D - mg/kg									
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	720	4100	1800
Gasoline Range Organics (GRO)	-	-	-	-	-	-	0.78 J	0.80 J	0.85 J
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	830	5100	2300
EPA Method 300.0 ANIONS									
Fluoride	--	-	-	-	--	-	2.1	6.7	8.1
Chloride	--	-	-	-	--	-	41	43	36
Nitrogen, Nitrite (As N)	--	-	-	-	--	-	0.17	<0.15	<0.75
Bromide	--	-	-	-	--	-	1.6	0.97	<0.23
Nitrogen, Nitrate (As N)	--	-	-	-	--	-	31	0.80	<0.080
Phosphorus	--	-	-	-	--	-	<0.55	<0.55	<2.8
Sulfate	--	-	-	-	--	-	130	150	100
EPA Method 8260B - mg/kg									
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02	(8)	<0.0047	<0.0048	<0.0047
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E+01	(8)	<0.0030	<0.0031	<0.0030
1,1,2,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03	(8)	<0.0079	<0.0081	<0.0080
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03	(8)	<0.0057	<0.0059	<0.0058
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01	(8)	<0.0026	<0.0027	<0.0027
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.016	<0.016	<0.016
1,1-Dichloropropene	-	-	-	-	-	-	<0.0039	<0.0040	<0.0039
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.0073	<0.0075	<0.0074
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<0.0084	<0.0086	<0.0085
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.0052	<0.0053	<0.0053
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	<0.0036	<0.0037	<0.0036
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.015	<0.015	<0.015
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<0.0035	<0.0036	<0.0035
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.0043	<0.0044	<0.0043
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<0.013	<0.013	<0.013
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<0.0041	<0.0042	<0.0041
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	<0.0035	<0.0036	<0.0036
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.0040	<0.0041	<0.0040
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<0.0055	<0.0057	<0.0056
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.0060	<0.0062	<0.0061
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.011	0.059 J	0.035 J
2,2-Dichloropropane	-	-	-	-	-	-	<0.0028	<0.0029	<0.0028

Table 2
Soil Analytical Results - August 16, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (4-6")	T-714-2 (4-6")	T-714-3 (4-6")
Hall Environmental Analytical Lab ID							1608B86-001	1608B86-002	1608B86-003
Sample Date							8/16/2016	8/16/2016	8/16/2016
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	<0.028	<0.029	<0.028
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.0036	<0.0037	<0.0036
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.027	<0.027	<0.027
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.010	0.034 J	<0.011
4-Chlorotoluene	-	-	-	-	-	-	<0.0043	<0.0044	<0.0044
4-Isopropyltoluene	-	-	-	-	-	-	<0.0044	<0.0045	<0.0044
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.014	<0.015	<0.014
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	<0.063	<0.065	<0.064
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<0.020	<0.020	<0.020
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.0039	<0.0040	<0.0040
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<0.0028	<0.0029	<0.0029
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<0.0059	<0.0061	<0.0060
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	<0.018	<0.018	<0.018
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.016	<0.017	<0.016
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<0.0032	<0.0033	<0.0032
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.0040	<0.0041	<0.0040
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.0097	<0.010	<0.0098
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<0.0037	0.0042 J	<0.0037
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.0043	<0.0044	<0.0044
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<0.0028	<0.0029	<0.0029
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.0045	<0.0046	<0.0045
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<0.0044	<0.0045	<0.0045
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<0.0042	<0.0043	<0.0043
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.015	<0.015	<0.015
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	<0.0040	<0.0041	<0.0040
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.0060	<0.0061	<0.0060
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	<0.0042	<0.0043	<0.0042
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.015	<0.016	<0.016
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	<0.014	<0.014	<0.014
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.0076	<0.0078	<0.0077
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	<0.0043	<0.0044	<0.0044
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	<0.0038	<0.0038	<0.0038
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	<0.0068	<0.0069	<0.0068
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.0044	<0.0045	<0.0044
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.0040	<0.0041	<0.0041

Table 2
Soil Analytical Results - August 16, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (4-6")	T-714-2 (4-6")	T-714-3 (4-6")
Hall Environmental Analytical Lab ID							1608B86-001	1608B86-002	1608B86-003
Sample Date							8/16/2016	8/16/2016	8/16/2016
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.0040	<0.0041	<0.0041
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	<0.0029	<0.0030	<0.0029
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.014	<0.014	<0.014
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.0071	<0.0073	<0.0072
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<0.0052	<0.0054	<0.0053
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.0036	<0.0037	<0.0037
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.0040	<0.0041	<0.0040
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	<0.0092	<0.0095	<0.0093
EPA Method 8270C - mg/kg									
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.21	<0.21	<0.21
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.15	<0.15	<0.15
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.15	<0.15	<0.15
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.16	<0.17	<0.17
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.19	<0.20	<0.20
2,4,5-Trichlorophenol	6.16E+03	(1)	2.69E+04	(5)	6.62E+01	(8)	<0.19	<0.20	<0.20
2,4,6-Trichlorophenol	6.16E+01	(1)	2.69E+02	(5)	6.74E-01	(8)	<0.16	<0.16	<0.16
2,4-Dichlorophenol	1.85E+02	(1)	8.07E+02	(5)	8.25E-01	(8)	<0.18	<0.18	<0.19
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<0.21	<0.21	<0.22
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<0.13	<0.13	<0.13
2,4-Dinitrotoluene	1.71E+01	(1)	8.23E+01	(4)	4.91E-02	(8)	<0.17	<0.18	<0.18
2,6-Dinitrotoluene	3.56E+00	(1)	1.72E+01	(4)	1.02E-02	(8)	<0.21	<0.21	<0.21
2-Chloronaphthalene	6.26E+03	(1)	2.83E+04	(5)	5.70E+01	(8)	<0.15	<0.16	<0.16
2-Chlorophenol	3.91E+02	(1)	1.77E+03	(5)	1.15E+00	(8)	<0.15	<0.16	<0.16
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.23	<0.23	<0.24
2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<0.16	<0.17	<0.17
2-Nitroaniline	6.30E+02	(2)	8.00E+03	(6)	1.60E+00	(9)	<0.21	<0.21	<0.21
2-Nitrophenol	-	-	-	-	-	-	<0.19	<0.20	<0.20
3,3'-Dichlorobenzidine	1.18E+01	(1)	5.70E+01	(4)	1.23E-01	(8)	<0.14	<0.15	<0.15
3+4-Methylphenol	-	-	-	-	-	-	<0.14	<0.14	<0.14
3-Nitroaniline	-	-	-	-	-	-	<0.17	<0.17	<0.18
4,6-Dinitro-2-methylphenol	4.93E+00	(1)	2.15E+01	(5)	3.94E-02	(8)	<0.12	<0.12	<0.12
4-Bromophenyl phenyl ether	-	-	-	-	-	-	<0.19	<0.19	<0.19
4-Chloro-3-methylphenol	-	-	-	-	-	-	<0.23	<0.24	<0.24
4-Chloroaniline	2.70E+01	(3)	1.10E+02	(7)	3.20E-03	(9)	<0.21	<0.22	<0.22
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	<0.22	<0.23	<0.23

Table 2
Soil Analytical Results - August 16, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (4-6")	T-714-2 (4-6")	T-714-3 (4-6")
Hall Environmental Analytical Lab ID							1608B86-001	1608B86-002	1608B86-003
Sample Date							8/16/2016	8/16/2016	8/16/2016
4-Nitroaniline	2.70E+02	(3)	1.10E+03	(7)	3.20E-02	(9)	<0.14	<0.14	<0.14
4-Nitrophenol	-	-	-	-	-	-	<0.15	<0.15	<0.15
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<0.17	<0.17	<0.17
Acenaphthylene	-	-	-	-	-	-	<0.16	<0.16	<0.16
Aniline	9.50E+02	(3)	4.00E+03	(7)	9.20E-02	(9)	<0.18	<0.19	<0.19
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<0.13	<0.13	<0.13
Azobenzene	5.60E+01	(3)	2.60E+02	(7)	1.84E+06	(9)	<0.24	<0.24	<0.24
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<0.17	<0.17	<0.17
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<0.15	<0.15	<0.15
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<0.17	<0.18	<0.18
Benzo(g,h,i)perylene	-	-	-	-	-	-	<0.17	<0.17	<0.18
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<0.17	<0.17	<0.18
Benzoic acid	2.50E+05	(2)	3.30E+06	(6)	3.60E+02	(9)	<0.16	<0.16	<0.16
Benzyl alcohol	6.30E+03	(2)	8.20E+04	(6)	9.60E+00	(9)	<0.15	<0.15	<0.16
Bis(2-chloroethoxy)methane	1.90E+02	(2)	2.50E+03	(6)	2.60E-01	(9)	<0.21	<0.21	<0.22
Bis(2-chloroethyl)ether	3.11E+00	(1)	1.95E+00	(5)	6.05E-04	(8)	<0.14	<0.15	<0.15
Bis(2-chloroisopropyl)ether	9.93E+01	(1)	5.19E+02	(4)	4.73E-02	(8)	<0.17	<0.18	<0.18
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	0.31 J	<0.16	<0.16
Butyl benzyl phthalate	2.90E+03	(3)	1.20E+04	(7)	4.60E+00	(9)	<0.17	<0.18	<0.18
Carbazole	-	-	-	-	-	-	<0.13	<0.13	<0.13
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<0.16	<0.17	<0.17
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<0.16	<0.16	<0.16
Dibenzofuran	-	-	-	-	-	-	<0.19	<0.20	<0.20
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	0.21 J	<0.20	<0.20
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<0.19	<0.19	<0.19
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	0.28 J	<0.15	<0.15
Di-n-octyl phthalate	-	-	-	-	-	-	<0.17	<0.17	<0.17
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<0.11	<0.11	<0.11
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	<0.18	<0.18	<0.18
Hexachlorobenzene	3.33E+00	(1)	1.60E+01	(4)	9.22E-02	(8)	<0.15	<0.16	<0.16
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.22	<0.22	<0.22
Hexachlorocyclopentadiene	3.70E+02	(1)	8.67E+02	(5)	1.34E+00	(8)	<0.22	<0.23	<0.23
Hexachloroethane	4.31E+01	(1)	1.88E+02	(5)	6.62E-02	(8)	<0.17	<0.17	<0.17
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<0.15	<0.15	<0.16
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.19	<0.19	<0.19

Table 2
Soil Analytical Results - August 16, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-1 (4-6")	T-714-2 (4-6")	T-714-3 (4-6")
Hall Environmental Analytical Lab ID							1608B86-001	1608B86-002	1608B86-003
Sample Date							8/16/2016	8/16/2016	8/16/2016
Nitrobenzene	6.04E+01	(1)	2.93E+02	(4)	1.44E-02	(8)	<0.20	<0.20	<0.21
N-Nitrosodi-n-propylamine	7.80E-01	(3)	3.30E+00	(7)	1.62E-04	(9)	<0.19	<0.19	<0.19
N-Nitrosodiphenylamine	7.94E-03	(1)	1.71E-01	(4)	9.84E-06	(8)	<0.19	<0.19	<0.19
Pentachlorophenol	9.85E+00	(1)	4.45E+01	(4)	6.08E-02	(8)	<0.12	<0.13	<0.13
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	<0.13	<0.13	<0.13
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	<0.15	<0.15	<0.15
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<0.15	<0.15	<0.15
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<0.15	<0.16	<0.16

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013

RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Laboratory data flags

J - Analyte detected below quantitation limits

Table 3
Soil Analytical Results - September 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-A (0-6")
Hall Environmental Analytical Laboratory ID							1609A18-001
Sample Date							9/14/2016
EPA Method 8015D - mg/kg							
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<1.8
Gasoline Range Organics (GRO)	-	-	-	-	-	-	<0.42
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<49
EPA Method 7470 mg/kg							
Mercury	2.38E+01	(1)	2.07E+01	(5)	6.54E-01	(8)	0.015
EPA Method 6010B Soil Metals - mg/kg							
Antimony	3.13E+01	(1)	1.42E+02	(5)	6.56E+00	(8)	1.0
Arsenic	4.25E+00	(1)	2.15E+01	(4)	2.99E-01	(8)	1.6
Barium	1.56E+04	(1)	4.35E+03	(5)	2.70E+03	(8)	190
Beryllium	1.56E+02	(1)	1.48E+02	(5)	1.96E+02	(8)	0.50
Cadmium	7.05E+01	(1)	7.21E+01	(5)	9.39E+00	(8)	<0.061
Chromium	9.66E+01	(1)	1.34E+02	(5)	2.01E+05	(8)	8.3
Cobalt	2.30E+01	(2)	3.50E+02	(6)	5.40E+00	(9)	3.7
Lead	4.00E+02	(1)	8.00E+02	(4)	2.80E+02	(10)	4.9
Nickel	1.56E+03	(1)	6.19E+03	(5)	4.85E+02	(8)	5.9
Selenium	3.91E+02	(1)	1.75E+03	(5)	1.02E-01	(8)	<1.7
Silver	3.91E+02	(1)	1.77E+03	(5)	1.38E+01	(8)	<0.060
Vanadium	3.94E+02	(1)	6.14E+02	(5)	1.26E+03	(8)	16
Zinc	2.35E+04	(1)	1.06E+05	(5)	7.41E+03	(8)	21
EPA Method 335.4 - mg/kg							
Cyanide	1.12E+01	(1)	1.21E+01	(5)	5.22E-03	(8)	1.04
EPA Method 8260B - mg/kg							
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02	(8)	<0.00162
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E+01	(8)	<0.00162
1,1,2,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03	(8)	<0.00162
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03	(8)	<0.00162
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01	(8)	<0.00162
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.000265
1,1-Dichloropropene	-	-	-	-	-	-	<0.00162
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.000392
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<0.00162
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.000492
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	<0.000275
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.000173
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<0.00162
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.000236
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<0.00162
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<0.00162
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	<0.000268
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.000299
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<0.00162
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.000304
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.000184
2,2-Dichloropropane	-	-	-	-	-	-	<0.000205

Table 3
Soil Analytical Results - September 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-A (0-6")
Hall Environmental Analytical Laboratory ID							1609A18-001
Sample Date							9/14/2016
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	0.00609 J
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.000276
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.000404
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.000427
4-Chlorotoluene	-	-	-	-	-	-	<0.000270
4-Isopropyltoluene	-	-	-	-	-	-	<0.000304
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.00324
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	0.0454
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<0.00162
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.000165
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<0.00162
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<0.00162
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	0.000835 J
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.000600
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<0.00162
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.000186
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.000299
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<0.00162
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.000411
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<0.00162
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.00162
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<0.00162
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<0.00162
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.000947
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	<0.000218
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.000370
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	<0.000204
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.000272
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	<0.00162
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.00162
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	<0.000395
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	<0.000290
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	<0.000288
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.000207
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.000237
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.000213
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	0.000203 J
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.000164
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.000196
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<0.00162
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.000204
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.000427
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	<0.000646
EPA Method 8270C - mg/kg							
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.11

Table 3
Soil Analytical Results - September 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-A (0-6")
Hall Environmental Analytical Laboratory ID							1609A18-001
Sample Date							9/14/2016
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.076
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.077
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.084
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.10
2,4,5-Trichlorophenol	6.16E+03	(1)	2.69E+04	(5)	6.62E+01	(8)	<0.10
2,4,6-Trichlorophenol	6.16E+01	(1)	2.69E+02	(5)	6.74E-01	(8)	<0.083
2,4-Dichlorophenol	1.85E+02	(1)	8.07E+02	(5)	8.25E-01	(8)	<0.093
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<0.11
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<0.066
2,4-Dinitrotoluene	1.71E+01	(1)	8.23E+01	(4)	4.91E-02	(8)	<0.089
2,6-Dinitrotoluene	3.56E+00	(1)	1.72E+01	(4)	1.02E-02	(8)	<0.11
2-Chloronaphthalene	6.26E+03	(1)	2.83E+04	(5)	5.70E+01	(8)	<0.078
2-Chlorophenol	3.91E+02	(1)	1.77E+03	(5)	1.15E+00	(8)	<0.078
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.12
2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<0.083
2-Nitroaniline	6.30E+02	(2)	8.00E+03	(6)	1.60E+00	(9)	<0.11
2-Nitrophenol	-	-	-	-	-	-	<0.099
3,3'-Dichlorobenzidine	1.18E+01	(1)	5.70E+01	(4)	1.23E-01	(8)	<0.073
3+4-Methylphenol	-	-	-	-	-	-	<0.072
3-Nitroaniline	-	-	-	-	-	-	<0.088
4,6-Dinitro-2-methylphenol	4.93E+00	(1)	2.15E+01	(5)	3.94E-02	(8)	<0.060
4-Bromophenyl phenyl ether	-	-	-	-	-	-	<0.095
4-Chloro-3-methylphenol	-	-	-	-	-	-	<0.12
4-Chloroaniline	2.70E+01	(3)	1.10E+02	(7)	3.20E-03	(9)	<0.11
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	<0.11
4-Nitroaniline	2.70E+02	(3)	1.10E+03	(7)	3.20E-02	(9)	<0.070
4-Nitrophenol	-	-	-	-	-	-	<0.076
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<0.085
Acenaphthylene	-	-	-	-	-	-	<0.081
Aniline	9.50E+02	(3)	4.00E+03	(7)	9.20E-02	(9)	<0.094
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<0.066
Azobenzene	5.60E+01	(3)	2.60E+02	(7)	1.84E+06	(9)	<0.12
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<0.086
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<0.075
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<0.090
Benzo(g,h,i)perylene	-	-	-	-	-	-	<0.088
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<0.088
Benzoic acid	2.50E+05	(2)	3.30E+06	(6)	3.60E+02	(9)	<0.082
Benzyl alcohol	6.30E+03	(2)	8.20E+04	(6)	9.60E+00	(9)	<0.078
Bis(2-chloroethoxy)methane	1.90E+02	(2)	2.50E+03	(6)	2.60E-01	(9)	<0.11
Bis(2-chloroethyl)ether	3.11E+00	(1)	1.95E+00	(5)	6.05E-04	(8)	<0.073
Bis(2-chloroisopropyl)ether	9.93E+01	(1)	5.19E+02	(4)	4.73E-02	(8)	<0.089
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	0.13 J
Butyl benzyl phthalate	2.90E+03	(3)	1.20E+04	(7)	4.60E+00	(9)	<0.088
Carbazole	-	-	-	-	-	-	<0.067

Table 3
Soil Analytical Results - September 14, 2016
Tank T-714 FCC Feed Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	T-714-A (0-6")
Hall Environmental Analytical Laboratory ID							1609A18-001
Sample Date							9/14/2016
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<0.085
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<0.080
Dibenzofuran	-	-	-	-	-	-	<0.10
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	0.12 J
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<0.097
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	0.11 J
Di-n-octyl phthalate	-	-	-	-	-	-	<0.085
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<0.057
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	<0.091
Hexachlorobenzene	3.33E+00	(1)	1.60E+01	(4)	9.22E-02	(8)	<0.078
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.11
Hexachlorocyclopentadiene	3.70E+02	(1)	8.67E+02	(5)	1.34E+00	(8)	<0.11
Hexachloroethane	4.31E+01	(1)	1.88E+02	(5)	6.62E-02	(8)	<0.085
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<0.078
Isophorone	-	-	-	-	-	-	<0.11
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.095
Nitrobenzene	6.04E+01	(1)	2.93E+02	(4)	1.44E-02	(8)	<0.10
N-Nitrosodi-n-propylamine	7.80E-01	(3)	3.30E+00	(7)	1.62E-04	(9)	<0.096
N-Nitrosodiphenylamine	7.94E-03	(1)	1.71E-01	(4)	9.84E-06	(8)	<0.097
Pentachlorophenol	9.85E+00	(1)	4.45E+01	(4)	6.08E-02	(8)	<0.064
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	<0.068
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	<0.075
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<0.075
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<0.079

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

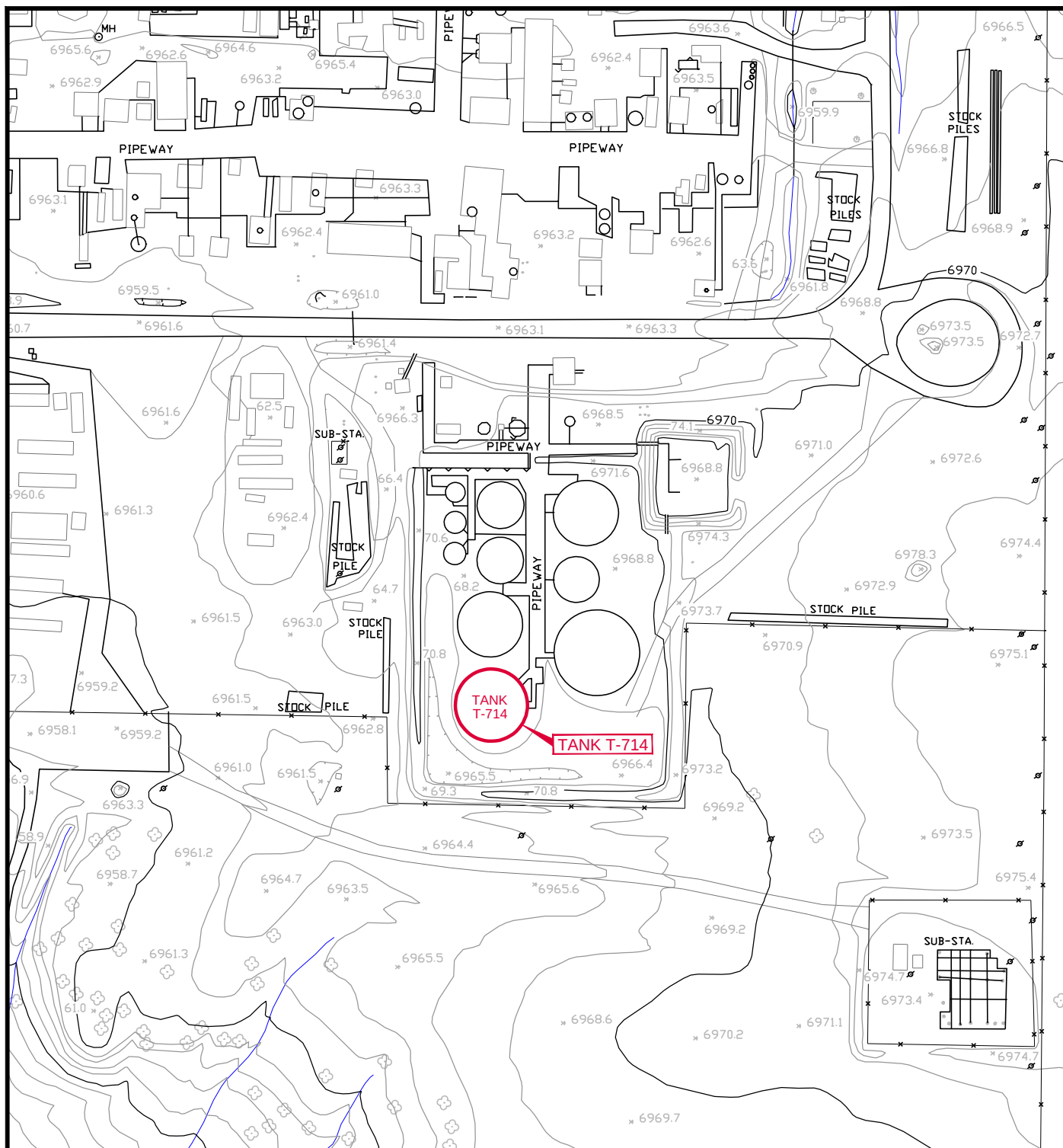
Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Laboratory data flags

J - Analyte detected below quantitation limits

Figures

- Figure 1 Site Location Map**
- Figure 2 Aerial Photo of Tank T-714**
- Figure 3 Extent of Release**
- Figure 4 Soil Sampling Locations**
-
-



Map Source: Compiled by Photogrammetric Methods from Photography
Acquired on March 1, 1998.



0 150
SCALE IN FEET



QUADRANGLE LOCATION



PROJ. NO.: Western Refining | DATE: 07/11/16 | FILE: WestRef-dA57

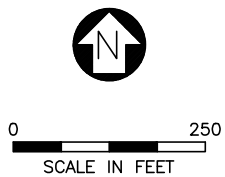
FIGURE 1
SITE LOCATION MAP
TANK T-714



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016

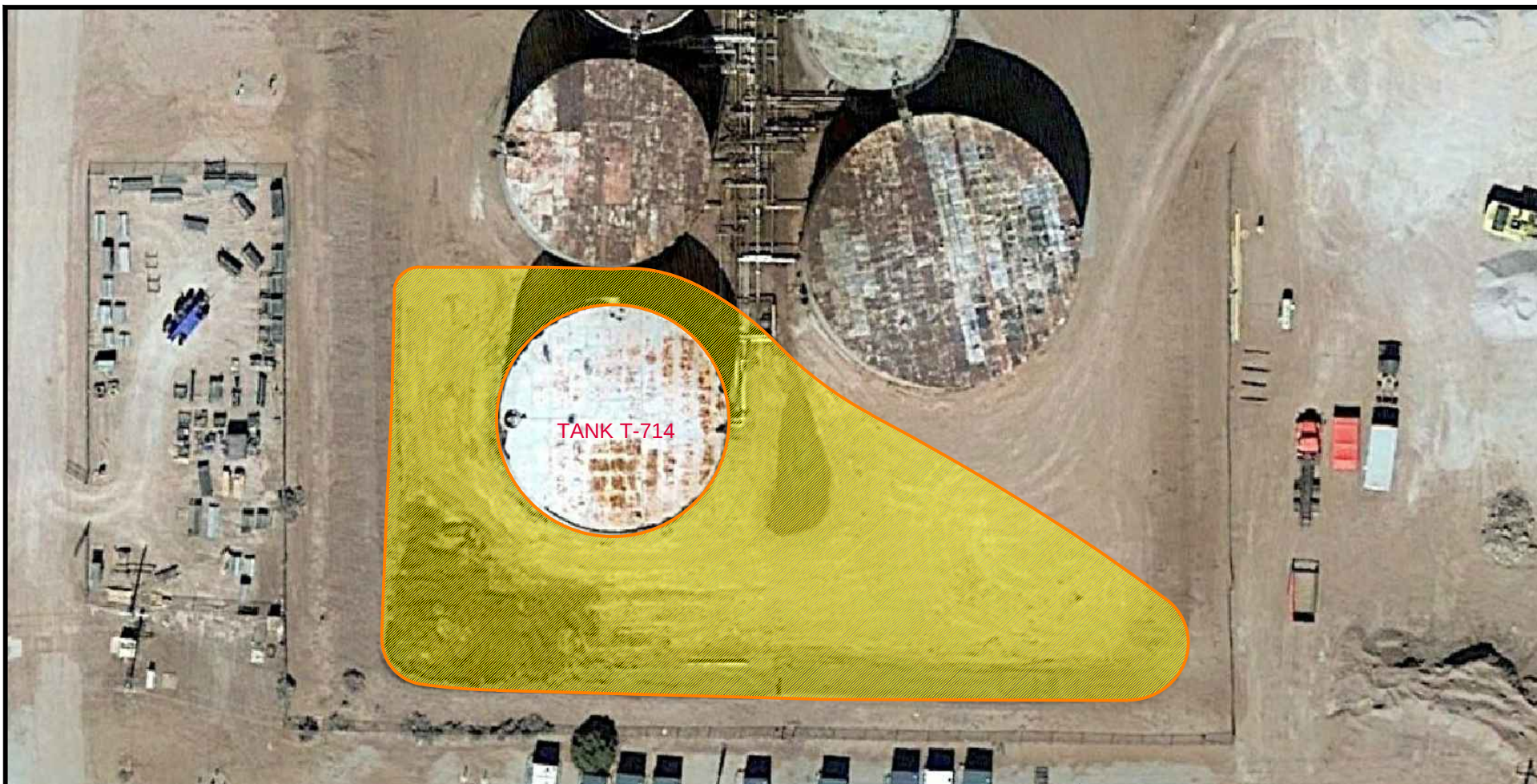


PROJ. NO.: Western Refining | DATE: 07/11/16 | FILE: WestRef-dA58

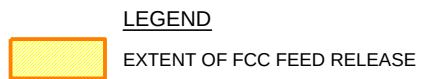
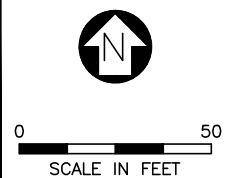
FIGURE 2
AERIAL PHOTO OF
TANK T-714



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016

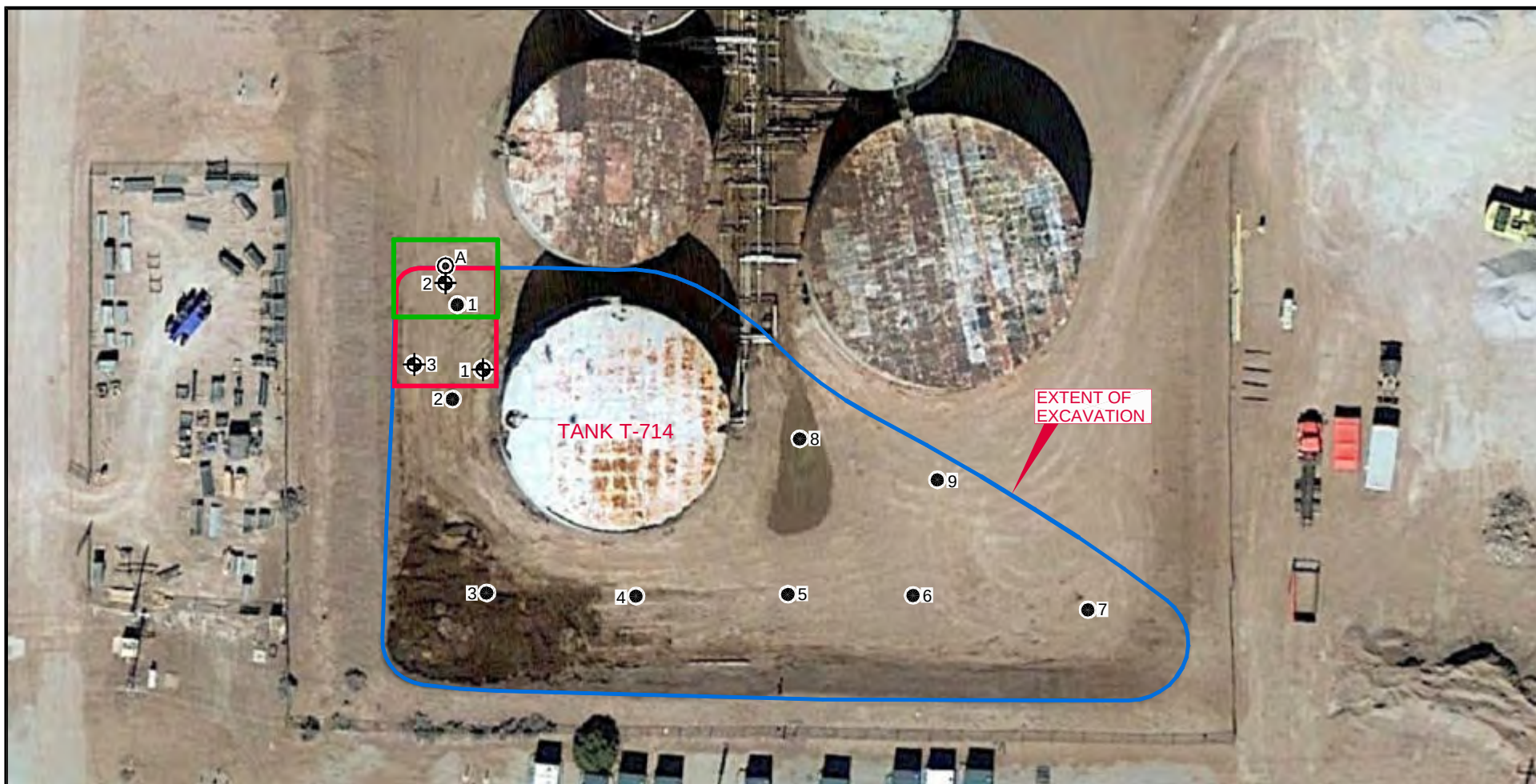


PROJ. NO.: Western Refining | DATE: 07/11/16 | FILE: WestRef-dA59

FIGURE 3
EXTENT OF FCC FEED RELEASE
TANK T-714



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016

LEGEND

- 1 SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER (AUGUST 16, 2016)
- 1 SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER (JUNE 14, 2016)
- A SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER (SEPTEMBER 14, 2016)
- EXTENT OF INITIAL EXCAVATION
- EXTENT OF EXCAVATION (AUGUST 10, 2016)
- EXTENT OF EXCAVATION (AUGUST 31, 2016)



0 50
SCALE IN FEET



QUADRANGLE LOCATION



PROJ. NO.: Western Refining | DATE: 11/14/16 | FILE: WestRef-dA81

FIGURE 4
SOIL SAMPLING LOCATIONS
TANK T-714



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

Appendix A
Form C-141 (February 17, 2016) -
February 5, 2016 Release

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 August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

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

Surface Owner	Mineral Owner	API No.
---------------	---------------	---------

LOCATION OF RELEASE

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

Latitude 35° 029' 010" Longitude -108° 025' 029"

NATURE OF RELEASE

Type of Release: FCC FEED (T-714) Tank Overflow	Volume of Release: 300 to 800 bbls (oil) (estimated)	Volume Recovered: 120 bbls Oil/ 600 bbls (water) (YTD)
Source of Release: FCC Feed (Heavy Oil)	Date and Hour of Occurrence: 02/5/2016; 0345 hrs	Date and Hour of Discovery: 02/5/2015; 0415 hrs
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD (C. Chavez) / NMED HWB (Kristen Van Horn)	
By Whom? Beck Larsen	Date and Hour: 2/5/2016 / 0654	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.* The FCC Tank (Heavy Oil) (T-714) overflowed on Friday, February 5, 2016 in the Hot Oil Tank Farm. The Pumper-gauger made an inspection of the area at 8:00 Pm on Thursday, February 4, 2016 with no indication of issues based on gauge readings. The Pumper-gauger made another early morning rounds at 0415 on February 5 at 0415. At this time T-714 FCC Feed Tank was overflowing due to a possible gauge malfunction. Valves were blocked in and product was rerouted to T-701. The onsite Fire Department, Offsite Supervisors, Process Supervisor, and the Environmental Department was notified of the incident. The onsite Fire Department sprayed a blanket of foam and water over the entire affected area in order to prevent any potential hazards associated with the overflow. The Environmental Department arrived at the scene at about 0615 hours, February 5. A contract vacuum truck began removing liquids until further assessment could be determined. The FCC Feed Product was contained within an earthen dike containment area of the Hot Oil Tank Farm. The exact quantity of release is undetermined at this point due to the uncertainty as to the exact time that the overflowed occurred, the amount of foam/water utilized, and the amount of water/snow melt from previous snow fall. The amount of the FCC Feed product that was released is only an estimate at this point and is under investigation. Records of the amount of cleanup efforts and the amount of material will be utilized at the completion of the project and will be used for the Final C-141 Report.

Describe Area Affected and Cleanup Action Taken.* After assessment of the spilled area, a contract company determined that in-situ solidification of the spilled area would be necessary using non-contaminated dirt. A contract company arrived on Monday, February 8, to begin the solidification process. The in-situ solidification process was deemed futile because the material would not solidify in-situ but would relocate to other areas. Therefore, the cleanup strategy was changed to solidification in roll-off boxes. An initial sample was collected on February 8 under (Laboratory # 1602354, see attached) from 3 roll-off containers (45 cubic yards) and submitted to Hall Environmental Laboratories for analysis. The analysis was received for (Laboratory Report # 1602354) on February 17 that indicated non-detect (ND) for all Environmental constituents. To date the contract company has filled about 30 roll-off boxes with FCC Feed product and dirt mixtures. Redrock Landfill requires analysis for each 100 yards of material. Composite samples were collected from 12 additional roll-off boxes (180 cubic yards) and sent to Hall for analysis. These 15 roll-off box containers will equate to about 225-270 cubic yards of material that will be shipped to Redrock Landfill for landfarming. The most recent sent of analysis is pending and is expected to be finalized early next week. The landfill is requesting additional analysis prior to shipment to determine which area of the landform the material has to be delivered. Attached is a copy of the initial analysis (Lab# 1602354), SDS for the FCC Feed, Map showing the approximate geographical coordinate location, and a sketch of the extent of the material around the FCC Feed Tank (T-714).

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: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Beck Larsen:		Approved by Environmental Specialist:	
Title: Environmental Engineer		Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com		Conditions of Approval:	Attached ☐
Date: 7/19/2016 Phone: (505) 722-0258			

* Attach Additional Sheets If Necessary

Appendix B

Photos of Release



2016-02-09



2016-02-09

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Wednesday, September 21, 2016 4:20 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Subject: RE: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status
Attachments: Tank T-116 Remediation Plan - Sept 2016.pdf

Hi,
Attached please find the T-116 Remediation Plan.

Thanks,
Ed

Ed Riege
Remediation Manager

Western Refining
Gallup Refinery
92 Giant Crossing Road
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Friday, September 09, 2016 7:39 AM
To: Riege, Ed <Ed.Riege@wnr.com>
Subject: RE: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

This email was sent by an external sender. Please use caution when opening attachments, clicking web links, or replying until you have verified this email sender.

Ed:

Ok. Thank you.

From: Riege, Ed [mailto:Ed.Riege@wnr.com]
Sent: Friday, September 9, 2016 7:20 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: VanHorn, Kristen, NMENV <Kristen.VanHorn@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

Carl,
I acknowledge and propose to have a work plan for your review by October 7, 2016.

Thanks,
Ed

Ed Riege
Remediation Manager

Western Refining
Gallup Refinery
92 Giant Crossing Road
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Wednesday, September 07, 2016 12:20 PM
To: Riege, Ed <Ed.Riege@wnr.com>
Cc: VanHorn, Kristen, NMENV <Kristen.VanHorn@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: FW: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

This email was sent by an external sender. Please use caution when opening attachments, clicking web links, or replying until you have verified this email sender.

Ed:

Good afternoon. The agencies request a remediation work plan for the above subject spill/release. The agencies have included some comments below for your consideration. Since the passive bio-remediation project has been ongoing for several years, in order to expedite the work plan, Western may reply to this message with a Remediation Plan proposal to the agencies.

If Western complies with U.S. Environmental Protection Agency (EPA) QA/QC Lab with DQOs and similar for field sampling methods, the agencies do not need a complete description of sampling and lab protocols. Also, we expect to see the verification of soil remediation protocol sampling along the base and sidewalls of any excavation(s).

Please respond by Friday COB September 9, 2016 with acknowledgement and proposed date for submittal of a Remediation work Plan for the above subject corrective action(s).

Thank you.

From: VanHorn, Kristen, NMENV
Sent: Wednesday, September 7, 2016 10:50 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>
Subject: RE: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

Carl-
NMED agrees that Western needs to submit a remediation work plan. I think that if Western wants to conduct soil removal and then confirmation sampling rather than re-sampling the area, that will expedite the cleanup. If they do the soil removal without approval from the agencies, then they are doing the work at risk and the agencies may require additional sampling.

Let me know your thoughts.

Thanks,
Kristen

From: Chavez, Carl J, EMNRD
Sent: Thursday, September 01, 2016 4:52 PM
To: VanHorn, Kristen, NMENV
Cc: Griswold, Jim, EMNRD
Subject: FW: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

Hey Kristen:

I think we need a remediation plan. OCD would propose resampling to greater depths in all areas approaching 3,000 ppm TPH due to duration of time and potential for migration of contamination to deeper depths. The agencies may specify sampling to the water table with sample collection to include water media in addition to soil sampling to confirm contamination is characterized with depth. We may be able to complete all work faster without a remediation plan and an understanding to allow Western to move forward to complete CA ASAP.

Soil removal and confirmation sampling using Encore sampler (or equivalent) at base of excavation(s) and sidewalls. I think the agencies need to agree on soil criteria. RBSLs DAF20 may work here. OCD is thinking TPH (DRO-extended,, GRO, MRO, ORO), BTEX, PAHs, MTBE, Cl, and RCRA 8 Metals.

What does NMED think? Thank you.

From: Chavez, Carl J, EMNRD
Sent: Thursday, September 1, 2016 4:48 PM
To: Sherman, Lupe, EMNRD <lupe.sherman@state.nm.us>
Subject: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

Lupe:

Re: AP-111

Good afternoon. Could you please insert the attached document into the "AP-111 C-141s" Thumbnail within AP-111.

Application Number "pGVG1204155810"

Thank you.

From: Chavez, Carl J, EMNRD
Sent: Thursday, September 1, 2016 4:48 PM
To: Sherman, Lupe, EMNRD <lupe.sherman@state.nm.us>
Subject: Gallup Refinery (AP-111) C-141s Tank 16 Ultra-Low Sulfur Diesel (ULSD) Biovent Project Release Status

Lupe:

Re: AP-111

Good afternoon. Could you please insert the attached document into the "AP-111 C-141s" Thumbnail within AP-111.

Application Number "pGVG1204155810"

Spill Remediation Plan Tank T-116



Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico

EPA ID# NMD000333211

AP-111

SEPTEMBER 2016

A handwritten signature in black ink, appearing to read 'Scott Crouch', written over a horizontal line.

Scott Crouch
Senior Geologist



DiSorbo
Environmental Consulting Firm

8501 North Mopac Expy
512.693.4190 (P)

Suite 300
512.279.3118 (F)

Austin, TX 78759
www.disorboconsult.com

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List of Acronyms

benzene, toluene, ethylbenzene, and xylene (BTEX)
Code of Federal Regulations (CFR)
data quality objective (DQO)
diesel range organics (DRO)
Environmental Protection Agency (EPA)
motor oil range organics (MRO)
methyl tert butyl ether (MTBE)
New Mexico Administrative Code (NMAC)
New Mexico Environment Department (NMED)
New Mexico Oil Conservation Division (NMOCD)
quality assurance/quality control (QA/QC)
Resource Conservation and Recovery Act (RCRA)
semi-volatile organic compound (SVOC)
total petroleum hydrocarbon (TPH)
toxicity characteristic leaching procedure (TCLP)
ultra low sulfur diesel (ULSD)
volatile organic compound (VOC)

Executive Summary

The Gallup Refinery, which is located 17 miles east of Gallup, New Mexico, has been in operation since the 1950s. Tank T-116 is located in the central portion of the main Tank Farm and is used to store Ultra Low Sulfur Diesel (ULSD). This Remediation Plan addresses a spill of ULSD, which occurred at T-116 on April 24, 2008. Western Refining Southwest, Inc. (“Western”) initiated remediation of the affected area in June 2008 with the removal of impacted soils to a depth of 2 feet. Subsequently, Western installed a passive bio-venting system to address remaining impacts. While bioventing has successfully removed volatile constituents, soil samples collected in May 2013 indicated that concentrations of diesel range organics (DRO) and naphthalene continued to exceed screening levels. Based on these sample results, Western will proceed to overexcavate the affected area in an effort to remove all soils with spill-related constituents at concentrations over the applicable screening levels.

Section 1

Introduction

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery is located on 810 acres. Figure 1 presents the refinery main tank farm.

The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck. Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, sulfur recovery, merox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

This Spill Remediation Plan addresses the area near Tank T-116, where Ultra Low Sulfur Diesel was spilled on April 24, 2008. Approximately 1,890 gallons of ULSD was discharged to the land surface but was retained within the tank dike walls. Free liquids were removed and impacted soils were excavated to a depth of 2 feet. To address impacts to deeper soils, a passive bio-venting system was installed in 2008 with additional vent pipes added in 2010. Volatile organic vapor concentrations have been routinely monitored through June 2016 and have demonstrated decreasing concentrations of volatile organic compounds. Soil samples collected in May 2013 indicated that DRO and naphthalene exceeded the New Mexico Environment Department (NMED) soil screening levels for the soil-to-groundwater pathway assuming a Dilution Attenuation Factor (DAF) of 20 in some of the samples from a depth of 2 to 3 feet (Table 1). These results indicate the passive bio-venting system has been successful in remediating the volatile organics, but longer chain hydrocarbons (e.g., DRO and naphthalene) remain above screening levels. The proposed remediation effort will target removal of the soils that continue to contain constituents with concentrations above screening levels.

Section 2

Proposed Remediation

This section discusses the remediation efforts that will be conducted to complete the full remediation of soils impacted by the release of ULSD at Tank T-116.

2.1.1 Remediation Activities

The areas with concentrations of constituents detected above the NMED soil screening levels at a depth of 2 – 3 feet, as noted in Table 1 and Figure 2 will be overexcavated to a depth of 4 feet. As shown on Figure 2, a portion of this area was previously excavated to a depth of 2 feet and backfilled with clean soil. In the area where clean backfill is present in the upper 2 feet, this material will be removed and stockpiled. The stockpiled material will be sampled using discrete samples collected using a hand auger with each sample representing no more than 10 cubic yards.

After removal of the clean backfill and the overexcavation is completed, confirmation soil samples will be collected from the floor and sidewalls of the excavation. The floor will be divided into grids representing no more than 225 square feet (approximately 15 feet by 15 feet). One discrete confirmation sample will be collected from the approximate center of each grid. The sidewalls will be divided into 15 feet long segments, with one confirmation sample collected from the approximate center of each segment at a depth of approximately 1 foot above the floor of the excavation.

The confirmation samples and the samples of the clean backfill materials will be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Skinner List metals, and total petroleum hydrocarbons (including gasoline range organics, diesel range organics, and motor oil range organics). The sample results will be compared to NMED non-residential (i.e., the lower of the industrial and construction worker) soil screening levels and the diesel#2 soil screening level. For any floor grids or wall segments that fail the comparison, the subject area will be overexcavated until the final confirmation samples meet all compliance criteria. If a sample representing the original clean backfill material fails the comparison criteria, then the associated volume of fill material will not be reused as fill, but rather further characterized as needed and disposed off-site at a permitted disposal facility.

The materials excavated for disposal will be sampled using composite samples in coordination with the selected disposal facility. The samples will be tested for hazardous characteristics in

accordance with 40 Code of Federal Regulations (CFR) Part 261, including analyses for VOCs, SVOCs and RCRA metals using the toxicity characteristic leaching procedure (TCLP); and ignitability, corrosivity, and reactivity. Additional analyses to determine waste characterization will include total petroleum hydrocarbons.

Quality Assurance/Quality Control (QA/QC) samples will be collected to monitor the validity of the soil sample collection procedures as follows:

- Field duplicates will be collected at a rate of 5 percent; and
- Equipment blanks will be collected from all sampling apparatus at a frequency of one per day.

2.1.2 Sample Handling

At a minimum, the following procedures will be used at all times when collecting samples during investigation, corrective action, and monitoring activities:

1. Neoprene, nitrile, or other protective gloves will be worn when collecting samples. New disposable gloves will be used to collect each sample;
2. All samples collected of each medium for chemical analysis will be transferred into clean sample containers supplied by the project analytical laboratory with the exception of soil, rock, and sediment samples obtained in Encore® samplers. Sample container volumes and preservation methods will be in accordance with the most recent standard EPA and industry accepted practices for use by accredited analytical laboratories. Sufficient sample volume will be obtained for the laboratory to complete the method-specific QC analyses on a laboratory-batch basis; and
3. Sample labels and documentation will be completed for each sample following procedures discussed below. Immediately after the samples are collected, they will be stored in a cooler with ice or other appropriate storage method until they are delivered to the analytical laboratory. Standard chain-of-custody procedures, as described below, will be followed for all samples collected. All samples will be submitted to the laboratory soon enough to allow the laboratory to conduct the analyses within the method holding times.

Chain-of-custody and shipment procedures will include the following:

1. Chain-of-custody forms will be completed at the end of each sampling day, prior to the transfer of samples off site.
2. Individual sample containers will be packed to prevent breakage and transported in a sealed cooler with ice or other suitable coolant or other EPA or industry-wide accepted method. The drainage hole at the bottom of the cooler will be sealed and secured in case of sample container leakage. Temperature blanks will be included with each shipping container.
3. Each cooler or other container will be delivered directly to the analytical laboratory.
4. Glass bottles will be separated in the shipping container by cushioning material to prevent breakage.
5. Plastic containers will be protected from possible puncture during shipping using cushioning material.
6. The chain-of-custody form and sample request form will be shipped inside the sealed storage container to be delivered to the laboratory.
7. Chain-of-custody seals will be used to seal the sample-shipping container in conformance with EPA protocol.
8. Signed and dated chain-of-custody seals will be applied to each cooler prior to transport of samples from the site.
9. Upon receipt of the samples at the laboratory, the custody seals will be broken, the chain-of-custody form will be signed as received by the laboratory, and the conditions of the samples will be recorded on the form. The original chain-of-custody form will remain with the laboratory and copies will be returned to the relinquishing party.
10. Copies of all chain-of-custody forms generated as part of sampling activities will be maintained on-site.

2.1.3 Data Quality Objectives

The Data Quality Objectives (DQOs) were developed to ensure that newly collected data are of sufficient quality and quantity to address the project goals, including Quality Assurance/Quality Control (QA/QC) issues (EPA, 2006). The project goals are established to determine and evaluate the presence, nature, and extent of releases of contaminants at specified SWMUs. The type of data required to meet the project goals includes chemical analyses of soil and groundwater to determine if there has been a release of contaminants.

The quantity of data is location specific and is based on the historical operations at individual locations. Method detection limits should be 20% or less of the applicable background levels, cleanup standards and screening levels.

Additional DQOs include precision, accuracy, representativeness, completeness, and comparability. Precision is a measurement of the reproducibility of measurements under a given set of circumstances and is commonly stated in terms of standard deviation or coefficient of variation (EPA, 1987). Precision is also specific to sampling activities and analytical performance. Sampling precision will be evaluated through the analyses of duplicate field samples and laboratory replicates will be utilized to assess laboratory precision.

Accuracy is a measurement in the bias of a measurement system and may include many sources of potential error, including the sampling process, field contamination, preservation, handling, sample matrix, sample preparation, and analysis techniques (EPA, 1987). An evaluation of the accuracy will be performed by reviewing the results of field/trip blanks, matrix spikes, and laboratory QC samples.

Representativeness is an expression of the degree to which the data accurately and precisely represent the true environmental conditions. Sample locations and the number of samples have been selected to ensure the data is representative of actual environmental conditions. Based on SWMU specific conditions, this may include either biased (i.e., judgmental) locations/depths or unbiased (systematic grid samples) locations. In addition, sample collection techniques (e.g., field monitoring and decontamination of sampling equipment) will be utilized to help ensure representative results.

Completeness is defined as the percentage of measurements taken that are actually valid measurements, considering field QA and laboratory QC problems. EPA Contract Laboratory Program (CLP) data has been found to be 80-85% complete on a nationwide basis and this has been extrapolated to indicate that Level III, IV, and V analytical techniques will generate data that are approximately 80% complete (EPA, 1987). As an overall project goal, the completeness goal is 85%; however, some samples may be critical based on location or field screening results and thus a sample-by-sample evaluation will be performed to determine if the completeness goals have been obtained.

Comparability is a qualitative parameter, which expresses the confidence with which one data set can be compared to another. Industry standard sample collection techniques and routine EPA

analytical methods will be utilized to help ensure data are comparable to historical and future data. Analytical results will be reported in appropriate units for comparison to historical data and cleanup levels.

Section 3 References

EPA, 1987, Data Quality Objectives for Remedial Response Activities; United States Environmental Protection Agency, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, OSWER Directive 9355.0-7B, 85p.

United States Environmental Protection Agency, Office of Environmental Information; EPA/240/B-06/001, p. 111.

NMED, 2015, Risk Assessment Guidance for Site Investigation and Remediation, New Mexico Environment Department.

Tables

Table 1 Summary of 2013 Analytical Results – Tank 116 Diesel Spill

Table 1
Summary of 2013 Analytical Results - Tank 116 Diesel Spill
Western Refining Logistics, LP Gallup, New Mexico

	NMED Non-residenital Soil Screening Levels	NMED Soil Screening Levels (DAF of 20)	SB#1 (2'-3')		SB#2 (2'-3')		SB#3 (2'-3')		SB#4 (2'-3')		SB#5 (2'-3')		SB#6 (2'-3')		SB#7 (2'-3')		SB#8 (2'-3')		SB#9 (2'-3')		SB#10 (2'-3')		SB#11 (2'-3')	
			05/14/13		05/15/13		05/14/13		05/15/13		05/14/13		05/14/13		05/15/13		05/14/13		05/14/13		05/15/13		05/14/13	
Volatile Organic Contituents (VOCs)																								
Benzene	87	0.038	<0.00070	U	<0.00073	U	<0.00069	U	0.0043	J	<0.00064	U	<0.00075	U	<0.00065	U	<0.00066	U	<0.00071	U	0.0033	J	<0.00066	U
Ethylbenzene	368	0.262	<0.0011	U	<0.0011	U	<0.0010	U	0.13		<0.00097	U	<0.0011	U	<0.00098	U	<0.0010	U	<0.0011	U	<0.0010	U	<0.0010	U
Isopropylbenzene	2,740	11.4	<0.0012	U	<0.0012	U	<0.0011	U	0.14		<0.0011	U	<0.0012	U	<0.0011	U	<0.0011	U	<0.0012	U	<0.0011	U	<0.0011	U
m,p-Xylene	696	2.97	<0.0020	U	<0.0021	U	<0.0019	U	1.7		<0.0018	U	0.006	J	<0.0018	U	<0.0019	U	<0.0020	U	0.047		<0.0019	U
o-Xylene	736	2.98	<0.0012	U	0.054		<0.0011	U	0.93		<0.0011	U	0.016		<0.0011	U	<0.0011	U	<0.0012	U	0.11		<0.0011	U
Toluene	14,000	12.1	<0.00082	U	<0.00085	U	<0.00080	U	0.0069		<0.00075	U	<0.00087	U	<0.00076	U	<0.00077	U	<0.00083	U	<0.00077	U	<0.00077	U
Xylenes, Total	798	2.98	<0.0020	U	0.054		<0.0019	U	2.6		<0.0018	U	0.022		<0.0018	U	<0.0019	U	<0.0020	U	0.16		<0.0019	U
TPH - Diesel Range Organics																								
DRO (>C10 - C28)	3,000		3,900		5,500		3,300		6,300		2,800		140		3,600		650		1,500		730		2,900	
Semivolatile Organic Compounds (SVOCs)																								
Acenaphthene	15,100	82.5	<0.23	U	3.8		<0.23	U	<0.22	U	<0.21	U	<0.25	U	<0.22	U	<0.022	U	<0.024	U	2.0		<0.022	U
Anthracene	75,300	851	<0.23	U	1.6	J	<0.23	U	<0.22	U	<0.21	U	<0.25	U	<0.22	U	<0.022	U	<0.024	U	0.87	J	<0.022	U
Fluoranthene	10,000	1,340	<0.23	U	<0.24	U	1.6	J	<0.22	U	<0.21	U	<0.25	U	<0.22	U	<0.022	U	<0.024	U	0.41	J	<0.022	U
Fluorene	10,000	8	<0.23	U	4.9		<0.23	U	<0.22	U	<0.21	U	<0.25	U	<0.22	U	<0.022	U	<0.024	U	<0.22	U	<0.022	U
Naphthalene	159	0.0823	<0.23	U	0.93	J	<0.23	U	2.7		<0.21	U	<0.25	U	<0.22	U	<0.022	U	<0.024	U	1.5	J	<0.022	U
Phenanthrene	7,530	86	0.39	J	6.9		<0.23	U	0.89	J	<0.21	U	<0.25	U	<0.22	U	<0.022	U	0.066	J	8.0		<0.022	U
Pyrene	7,530	192	<0.23	U	2.1		1.0	J	<0.22	U	<0.21	U	<0.25	U	0.94	J	<0.022	U	0.068	J	1.3	J	<0.022	U

NOTES:
All concentrations in mg/Kg
<0.022 - U - Constituent not detected above the method detection limit
J - Constituent detected below the practical quantitation limit
3,900 - Concentration exceeds the New Mexico Environmental Department (NMED) soil screening level
Screening levels based on NMED Risk Assessment Guidance for Site Investigations and Remediation July 2015

Figures

Figure 1 Site Location Map

Figure 2 DR0 Concentration



Aerial Map Source: Google Map, 01/05/2014.



0 200
SCALE IN FEET



SITE LOCATION

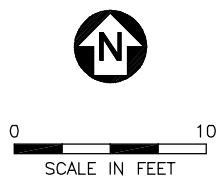
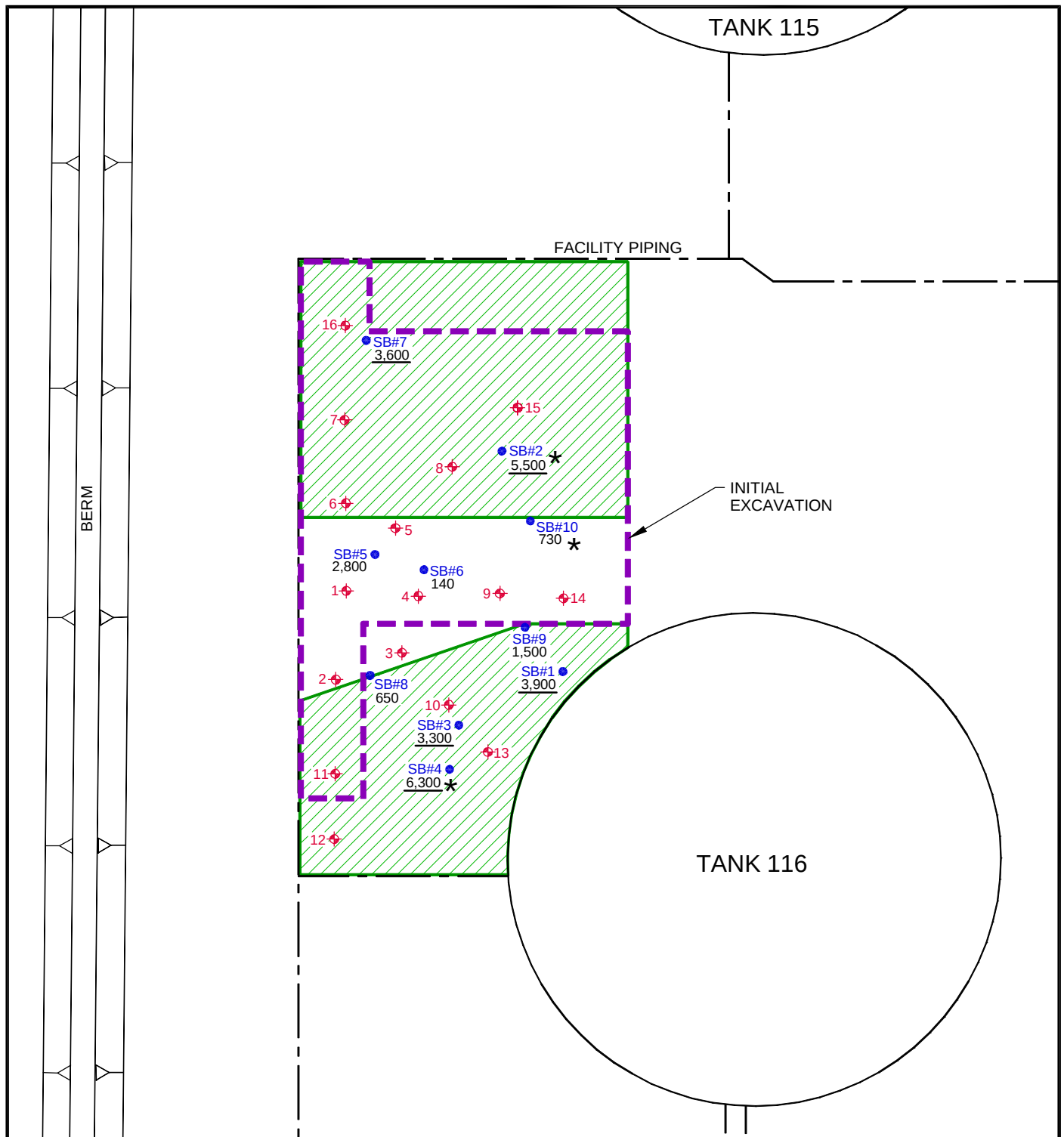


PROJ. NO.:Western Refining | DATE:09/17/16 | FILE:WestRef-dA67

FIGURE 1
SITE LOCATION MAP
TANK 116 DIESEL SPILL AREA



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



PROJ. NO.:Western Refining | DATE:09/17/16 | FILE:WestRef-dA68

FIGURE 2
DRO CONCENTRATION
TANK 116 DIESEL SPILL AREA



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

Appendix D

Western Refining – Gallup Refinery

**Standard Operating Procedures Backwashing the
Carbon Canister to Reduce Pressure on the Vessel**



GALLUP REFINERY

BACKWASHING THE CARBON CANISTER TO REDUCE PRESSURE ON THE VESSEL

PURPOSE

1. The purpose of this procedure is to inform the WWTP Operator how to safely, and effectively, backwash the WWTP carbon canisters when the canisters begin to pressure up. This backwash will remove deposits that have accumulated on top of the carbon bed and improve water flow through the carbon bed.

REFERENCE MATERIAL

1. Evoqua Water Technologies Tech Note No. 29

MINIMUM PERSONNAL

1. WWTP Operator

SAFETY EQUIPMENT

1. Standard refinery PPE including, but not limited to:
 - a. Hard hat
 - b. Steel toe boots
 - c. Fire resistant coveralls
 - d. Personal H₂S monitor
 - e. Safety glasses/goggles
 - f. Leather gloves
 - g. Face shield

EQUIPMENT INVOLVED

1. WWTP Carbon Canisters
2. WWTP PLC
3. Carbon canister backwash hose to STP-1.
4. Carbon Canister Pressure Transmitter

Approved/Recertified Delbert Johnson	Effective 2014 June	Supersedes	Revision # NEW	Page 1 of 4
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OBJECTIVE:

1. The objective of this procedure is to safely, and effectively, backwash the WWTP carbon canisters to alleviate pressure buildup in the vessel. This backwash should be conducted when the pressure on the vessels exceeds 35 PSI. The backwash of the carbon bed removes deposits from the carbon bed that can harden and impede the effluent flow through the carbon bed.

PRE-REQUISITES/PRE-CAUTIONS

1. Prior to the backwash, verify that the correct valve lineup is in effect to make a backwash possible. This lineup is reflected in this procedure.
2. **Caution:** While conducting a backwash, pay attention to the pressure on the carbon canisters to avoid over-pressuring the vessels and busting a rupture disk. There is local pressure indication (a digital gauge) located on the inlet piping directly southeast of the canisters. The pressure is also displayed on the WWTP PI screen in the Control Room. The rupture disks are set to bust at 75 PSI.

PROCEDURE:

1. When the pressure on the carbon canisters exceeds 35 PSI, prepare to conduct a backwash on the carbon canister that the flow is **first** being routed to if the canisters are in lead/lag. (This is the canister that will have deposits accumulated on top of the carbon bed that will impede water flow through the bed.)
2. Start off with a low flow rate (100 GPM).
3. A carbon canister backwash lineup is achieved by using the following valve lineup:
 - a. Line up the WWTP effluent, first, to the carbon canister that is not being backwashed. The valve should be opened to allow effluent to travel to the top of the canister that is not being backwashed.
 - b. Close the valve behind the manifold to keep effluent from traveling to STP-1.
 - c. Once the STP-1 valve is closed, open the two valves on the very bottom of the manifold to allow the flow to travel from the bottom of one canister to the bottom of the canister that is being backwashed.
 - d. Close the valve that accesses the middle piping of the manifold or the flow will not go to the other canister; it will go directly to the backwash hose to STP-1.
 - e. The flow will travel from the bottom of one canister to the bottom of the backwash canister and out the top of this canister. This backwash will remove any deposits that have accumulated on top of the carbon bed while this vessel was in service.
 - f. Open the valve on the manifold to allow the flow to travel out of the top of the backwash canister and into the middle pipe on the manifold that accesses the backwash hose.
 - g. Open the valve that goes to the backwash hose.
 - h. Open the valve at the end of the backwash hose to allow flow to travel to STP-1.

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SOP00

4. Closely monitor the pressure of the carbon canisters to avoid busting the overpressure rupture disks (75 PSI max.) on the carbon canister manifold.
5. Slowly bring up the flow to 200 GPM to “fluff” the carbon bed and allow bed expansion for optimum carbon performance.
6. Run this backwash for at least an hour to cleanse and fluff the carbon bed thoroughly.
7. After the backwash, return the valve lineup to its original configuration and flow through one canister only until the benzene levels reach critical level, then put the canisters into lead-lag.

The unit operator has full authority to shut down unit during any unsafe conditions.

Approved/Recertified Delbert Johnson	Effective 2014 June	Supersedes	Revision # NEW	Page 3 of 4
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DATE	NAME	SIGNATURE

Appendix E

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NMD000333211		2. Page 1 of 1	
3. Facility Name and Address WESTERN REFINING SOUTHWEST GALLUP REFINING 22 GIANT CROSSING ROAD GALLUP, NM 87301 4. Generator's Phone: 505 722 0258		Manifest Document # D107576	
5. Transporter 1 Company Name Advanced Chemical Transport Inc. (SV)		6. US EPA ID Number CAR000070540	
7. Transporter 2 Company Name		8. US EPA ID Number	
9. Designated Facility Name and Site Address Candy Martey, Inc Section 4, 8 & 9 of T11S, R31E NWPM Chavez County, NM 88202		10. US EPA ID Number NON HAZ	
11. WASTE DESCRIPTION		13. Total Quantity 4.0	
a. Non-RCRA/Non-DOT Regulated Material Solid (petroleum contaminated soil from carbon cannister)		14. Unit Wt./Vol. Y R EV	
b.		15. Special Handling Instructions and Additional Information Bin 104052	
c.		16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.	
d.		17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ALVIN DORSEY Signature Alvin Dorsey Date 03/02/16	
G. Additional Descriptions for Materials Listed Above Project Number 91863 Document #: D107576 1) CARBONCNSTR WEG- 24 hour emergency contact: CHEMTREC 800-424-9300		H. Handling Codes for Wastes Listed Above	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name EUGENE VIGIL Signature E. Vigil Date 03/02/16		19. Discrepancy Indication Space	
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19. 10:33 AM		Date	
Printed/Typed Name J. TOLSON Signature J. Tolson Date 03/03/16		Date	

NON-HAZARDOUS WASTE

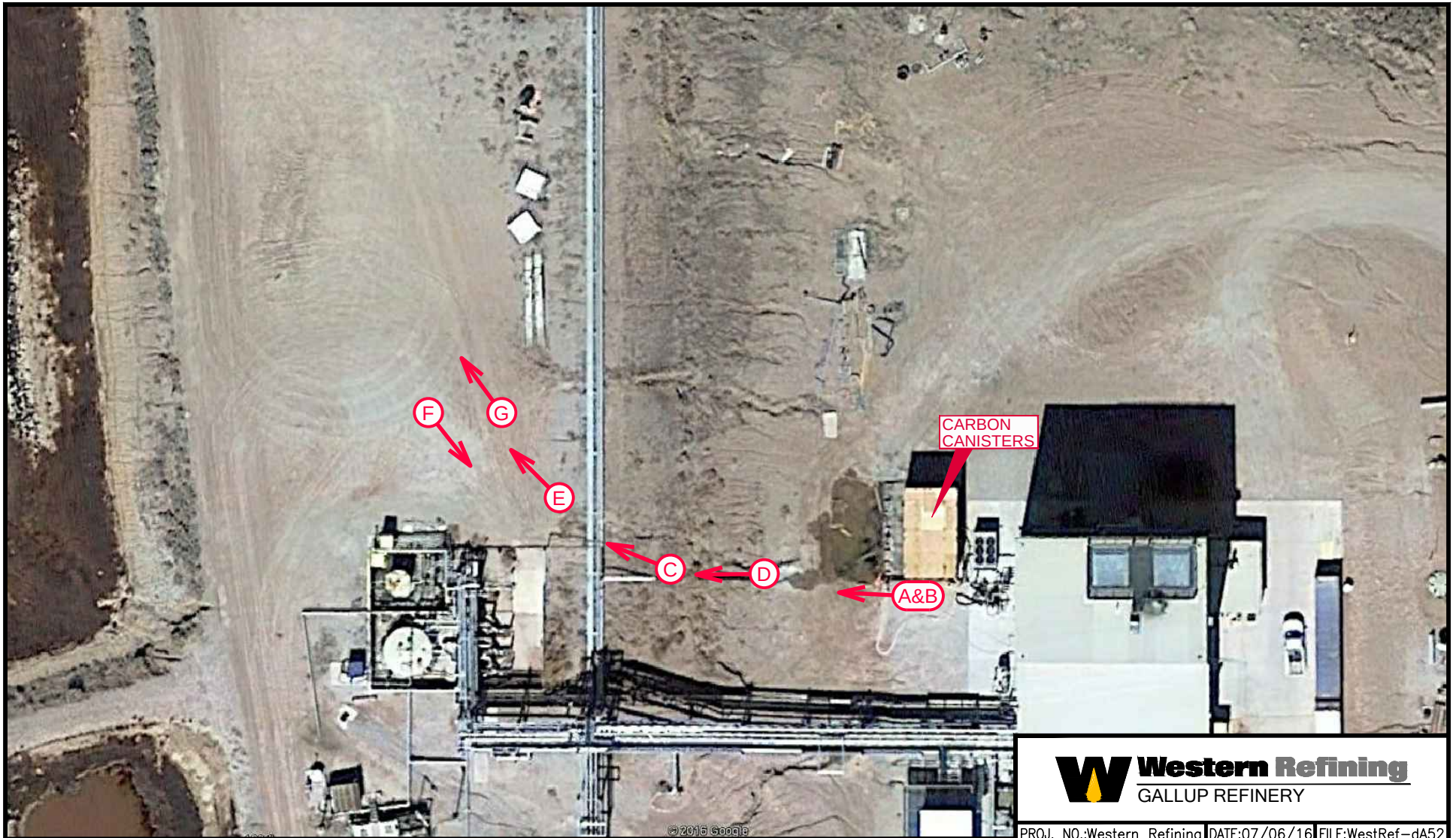
GENERATOR

TRANSPORTER

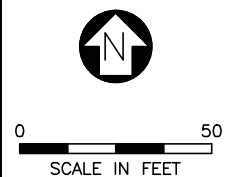
FACILITY

Appendix F

Photographs

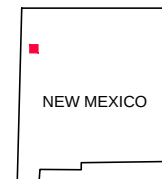


Aerial Source: Google Maps, 03/18/2016



LEGEND

PHOTOGRAPH IDENTIFICATION
(LOCATION AND DIRECTION OF VIEW)



QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining DATE:07/06/16 FILE:WestRef-dA52

PHOTOGRAPH LOCATIONS
WASTEWATER TREATMENT PLANT

DiSorbo
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Photo A looking west



Photo B looking west



Photo C looking west-northwest

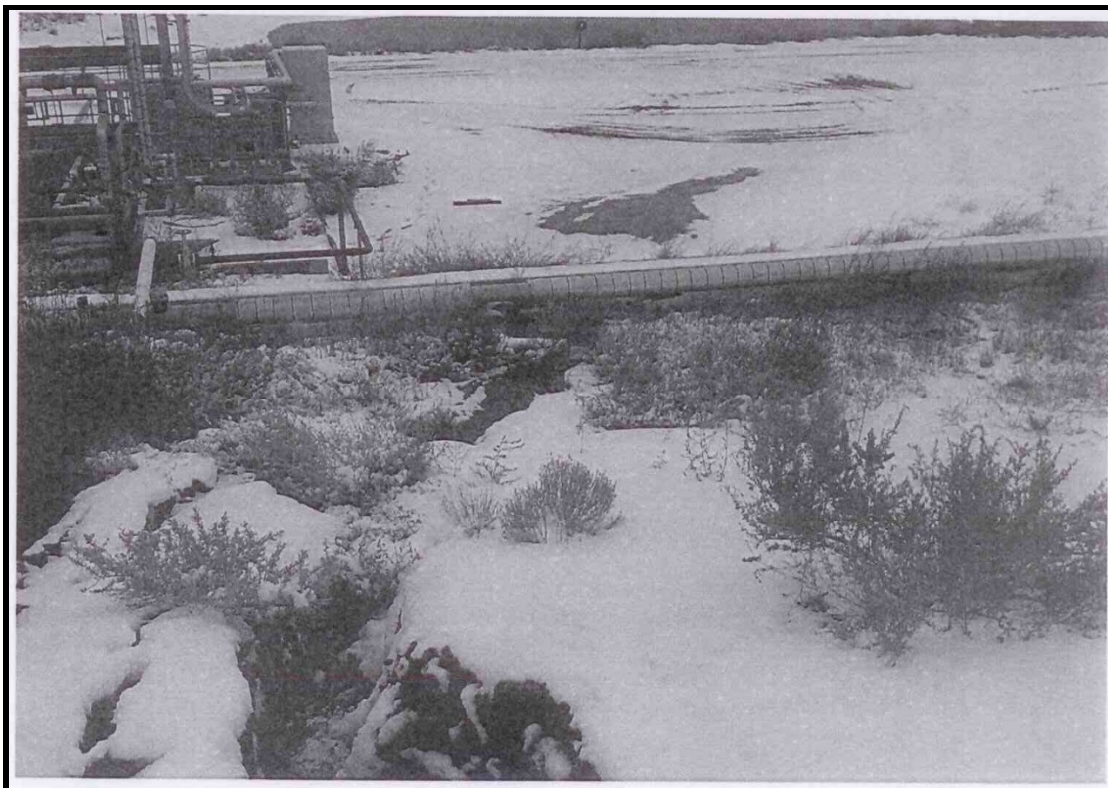


Photo D looking west

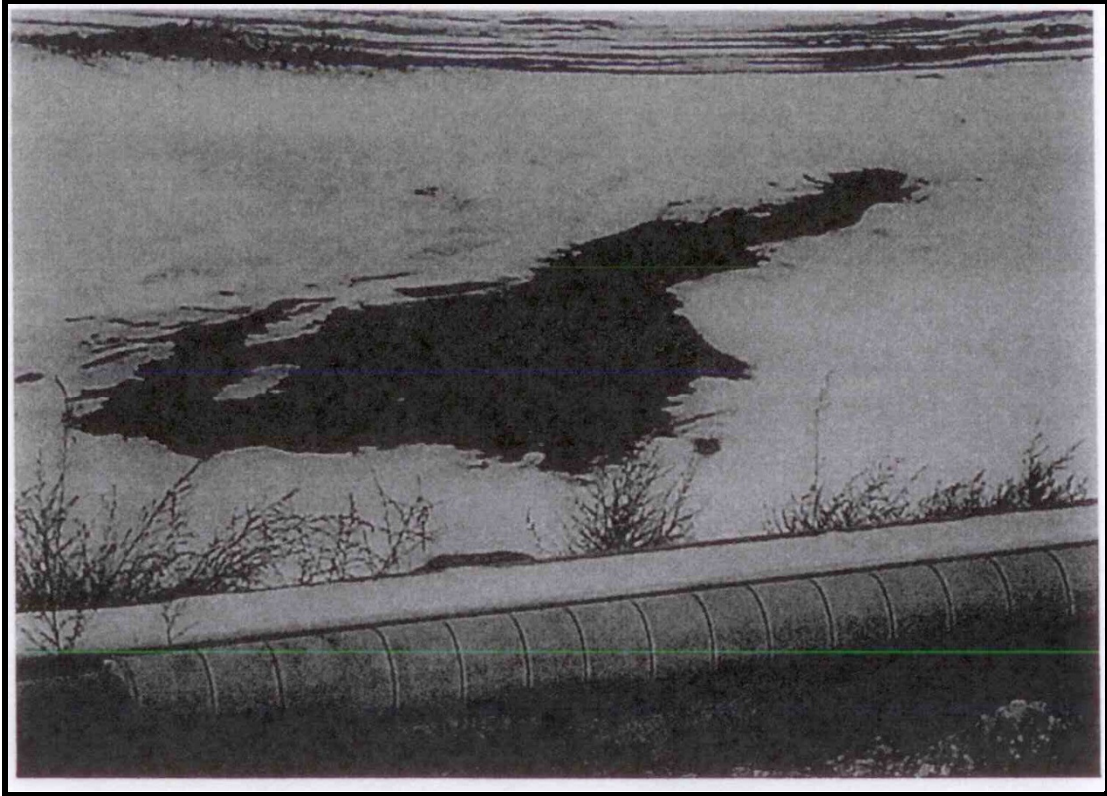


Photo E looking northwest



Photo F looking southeast



Photo G looking northwest

Appendix G

Field Methods

Appendix G

Field Methods

The following procedures are to be followed during sampling collection:

The soil sampling kit (Method 5035) for Volatile Organics Analysis (8260, 8021, & 8015) are to be used and consist of the following components:

- 1) **Methanol Kit** - One labelled paper envelope that contains two vials preserved with methanol and a plastic syringe.
- 2) **Sodium Bisulfate Kit** - One labelled quart sealable bag that contains two 40-ml VOA vials preserved with sodium bisulfate and placed in bubble wrap sleeve. A plastic syringe is also included.
- 3) **One 8-oz glass jar.**

Sampling procedures included:

Methanol Kit – Using new gloves take the syringe and collect 10 CCs of soil and extrude into one of the vials. Collect and extrude 10 CCs into the second vial and place both vials in the paper envelope. Seal the envelope flap with clear tape. Fill out the label with the date and time the sample was collected and the sampler's name/initials. The project location should be included on the label. All labels will be completed with waterproof ink and covered with clear tape. Place the paper envelope in a quart sealable bag. Place the quart bag in a gallon sealable bag.

Sodium Bisulfate Kit – Using new gloves, if necessary, take the syringe and collect 4 CCs of soil and extrude into one of the vials. Collect and extrude 4 CCs into the second vial and place both vials in the bubble wrap and then in the quart sealable bag. Fill out the label on the quart sealable bag and cover with clear tape. Place in the gallon sealable bag.

8-oz Jar/Teflon Lined Lid - Using new gloves, if necessary, and a clean trowel or sampling knife, fill the 8-oz jar completely with soil and seal with the lid. Fill out the label and cover with clear tape. Place the jar in bubble wrap and then in the gallon sealable bag.

If additional analyses such as metals or semivolatile organics are required, then an additional 8-oz jar must be collected.

The bags will be placed into a cooler filled with ice. The sampling location and sampling time will be recorded on the field log and the chain-of-custody form. All samples are to be kept on ice until delivered by hand to the laboratory.

The sample containers were secured in bubble wrap and then placed in new sealable bags. The bags will be placed into a cooler filled with ice packed in sealable bags. All samples were kept cold (at 4°C or below) and delivered by hand, transported to the laboratory.

Appendix H

Soil Sampling Logs



CC-8 Δ

CC-9 Δ

Δ CC-7

Δ CC-6

Δ CC-5

CC-3 Δ

Δ CC-4

CC-1 Δ

Δ CC-2

© 2016 Google

Google earth
Earth Point

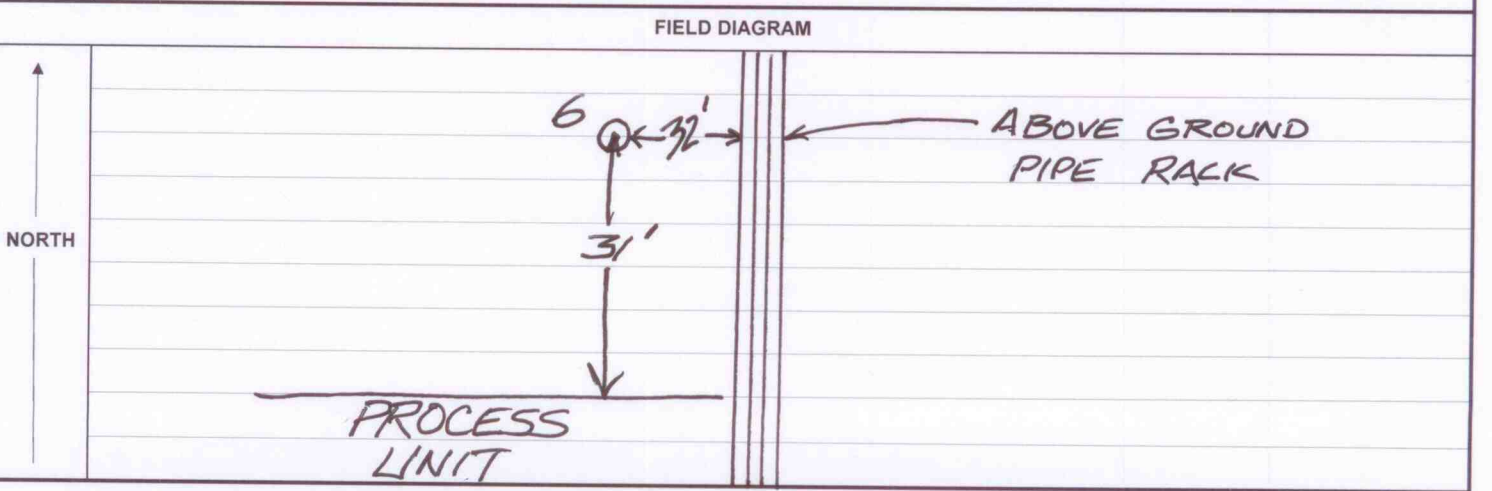
1997

Imagery Date: 3/18/2016 35° 29.493' N 108° 25.742' W elev 6933 ft eye alt 7233 ft

Western Refining SW, Inc. - Gallup Refinery

[illegible]

Project Name WWTP CARBON CANISTER		Boring Number WWTP-CC-66	Sample Date 11.14.16	Sample Time 1045	Logged and Sampled By: TRACY PAYNE
Total Depth 6"	GPS Coordinates N35°29.488' W108°25.753'				
Current Precipitation None Drizzle Light Moderate Heavy Continuous Intermittent			Estimated Wind Speed: Slight Moderate Strong Very Strong		Temperature 68°
Comments			Clear? ☒ Cloudy?		

[illegible][illegible]

Project Name	Boring Number	Sample Date	Sample Time	Logged and Sampled By:
WWTP CARBON CANISTER	WWTP-CC-7	6.14.16	1105	TRACY PAYNE

Current Precipitation

☒ None ☐ Drizzle ☐ Light ☐ Moderate ☐ Heavy ☐ Continuous ☐ Intermittent

Estimated Wind Speed: Slight **Moderate** Strong Very Strong

Temperature	<u>Clear?</u>	Cloudy?
73°		

Comments
USED HAND AUGER TO COLLECT SOIL SAMPLE

NO.	PHOTO LOG - DESCRIPTION
	NO PHOTOS

A hand-drawn site plan on lined paper. On the left, a vertical arrow points upwards, labeled "NORTH". To the right of the north arrow, a square symbol contains a cross, with the word "DRAIN" written above it and an arrow pointing down to the square. A line segment labeled "46'" connects this square to a circular symbol labeled "7" with a cross through it. From the circular symbol, a horizontal line segment labeled "60'" extends to the right, ending at a vertical line composed of three parallel lines, representing a building or wall.

Project Name		Boring Number	Sample Date	Sample Time	Logged and Sampled By:
WWTP CARBON CANISTER		WWTP-CC-8	6.14.16	1135	TRACY PAYNE
Total Depth	GPS Coordinates				

Total Depth 6"	GPS Coordinates N 35° 29.501' W 108° 25.764'
-------------------	---

Current Precipitation

None Drizzle Light Moderate Heavy Continuous Intermittent

Estimated Wind Speed:

Slight **Moderate** Strong Very Strong

Temperature

Clear? Cloudy?

Comments

USED HAND AUGER TO COLLECT SOIL SAMPLE

[illegible]

Diagram illustrating a water line layout:

- A **DRAIN** is shown on the left.
- A line connects the drain to a point labeled **8** (distance: 31').
- A line connects point **8** to a point labeled **9** (distance: 59').
- A line connects point **9** to a point labeled **55** (distance: 55').
- The line ends at a vertical line representing an **ABOVE GROUND PIPE RACK**.
- The text **NOT TO SCALE** is written at the bottom left.

Western Refining SW, Inc. - Gallup Refinery

[illegible]

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

email or Fax#: <u>ED.RIEGE@WNR.COM</u>		Project Manager: <u>ED RIEGE</u>				
QA/QC Package: ☒ Standard		Sampler: <u>TRACY PAYNE</u>				
Accreditation ☐ NELAP ☐ Other _____		On Ice: ☒ Yes ☐ No				
☒ EDD (Type) <u>EXCEL</u>		Sample Temperature: <u>1.2</u>				
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
6/14/16	1030	SOIL	WWTP-CC-5(0-6")	JAR-3	NEAT	
				VIAL-2	SOBI	
				VIAL-2	MEOH	
	1045	SOIL	WWTP-CC-6(0-6")	JAR-3	NEAT	
				VIAL-2	SOBI	
				VIAL-2	MEOH	
	1105	SOIL	WWTP-CC-7(0-6")	JAR-3	NEAT	
				VIAL-2	SOBI	
				VIAL-2	MEOH	
	1135	SOIL	WWTP-CC-8(0-6")	JAR-3	NEAT	
				VIAL-2	SOBI	
				VIAL-2	MEOH	

Remarks:

Date: 08/15/16	Time: 0810	Relinquished by: [Signature]	Received by: [Signature]	Date: 08/15/16	Time: 0810
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix I
Analytical Data – Confirmation Samples

Appendix I-1
Hall Environmental Analysis Laboratory, Inc.
January 20, 2016
Analytical Report No. 1601570



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

January 20, 2016

Beck Larsen

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

RE: WWTP Carbon Canister Overflow

OrderNo.: 1601570

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/15/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1601570**

Date Reported: **1/20/2016**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Carbon Canister-Soil Sample #1

Project: WWTP Carbon Canister Overflow

Collection Date: 1/13/2016 1:00:00 PM

Lab ID: 1601570-001

Matrix: SOIL

Received Date: 1/15/2016 4:06:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/18/2016 2:03:37 PM	23255
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/18/2016 2:03:37 PM	23255
Surr: DNOP	121	70-130		%REC	1	1/18/2016 2:03:37 PM	23255
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	13	4.8		mg/Kg	1	1/19/2016 10:40:44 AM	23266
Surr: BFB	115	66.2-112	S	%REC	1	1/19/2016 10:40:44 AM	23266
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.38	0.048		mg/Kg	1	1/19/2016 10:40:44 AM	23266
Toluene	0.59	0.048		mg/Kg	1	1/19/2016 10:40:44 AM	23266
Ethylbenzene	0.10	0.048		mg/Kg	1	1/19/2016 10:40:44 AM	23266
Xylenes, Total	0.46	0.096		mg/Kg	1	1/19/2016 10:40:44 AM	23266
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	1/19/2016 10:40:44 AM	23266

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1601570**

Date Reported: 1/20/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Carbon Canister-Soil Sample #2

Project: WWTP Carbon Canister Overflow

Collection Date: 1/13/2016 1:12:00 PM

Lab ID: 1601570-002

Matrix: SOIL

Received Date: 1/15/2016 4:06:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	13	9.5		mg/Kg	1	1/18/2016 2:25:11 PM	23255
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/18/2016 2:25:11 PM	23255
Surr: DNOP	121	70-130		%REC	1	1/18/2016 2:25:11 PM	23255
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/19/2016 11:04:27 AM	23266
Surr: BFB	98.7	66.2-112		%REC	1	1/19/2016 11:04:27 AM	23266
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.046		mg/Kg	1	1/19/2016 11:04:27 AM	23266
Toluene	ND	0.046		mg/Kg	1	1/19/2016 11:04:27 AM	23266
Ethylbenzene	ND	0.046		mg/Kg	1	1/19/2016 11:04:27 AM	23266
Xylenes, Total	ND	0.093		mg/Kg	1	1/19/2016 11:04:27 AM	23266
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	1/19/2016 11:04:27 AM	23266

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1601570**

Date Reported: **1/20/2016**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Carbon Canister-Soil Sample #3

Project: WWTP Carbon Canister Overflow

Collection Date: 1/13/2016 1:25:00 PM

Lab ID: 1601570-003

Matrix: SOIL

Received Date: 1/15/2016 4:06:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/18/2016 2:46:45 PM	23255
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/18/2016 2:46:45 PM	23255
Surr: DNOP	89.7	70-130		%REC	1	1/18/2016 2:46:45 PM	23255
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/19/2016 11:28:10 AM	23266
Surr: BFB	105	66.2-112		%REC	1	1/19/2016 11:28:10 AM	23266
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	1/19/2016 11:28:10 AM	23266
Toluene	ND	0.048		mg/Kg	1	1/19/2016 11:28:10 AM	23266
Ethylbenzene	ND	0.048		mg/Kg	1	1/19/2016 11:28:10 AM	23266
Xylenes, Total	ND	0.096		mg/Kg	1	1/19/2016 11:28:10 AM	23266
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	1/19/2016 11:28:10 AM	23266

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1601570

20-Jan-16

Client: Western Refining Southwest, Gallup

Project: WWTP Carbon Canister Overflow

Sample ID	MB-23255	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 23255			RunNo: 31488					
Prep Date:	1/18/2016	Analysis Date: 1/18/2016			SeqNo: 963650		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	8.8		10.00		87.8	70	130			

Sample ID	LCS-23255		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 23255		RunNo: 31488					
Prep Date:	1/18/2016		Analysis Date: 1/18/2016		SeqNo: 963694		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	79.0	65.8	136			
Surr: DNOP	4.2		5.000		83.1	70	130			

Sample ID	1601570-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	Carbon Canister-Soi		Batch ID: 23255		RunNo: 31488					
Prep Date:	1/18/2016		Analysis Date: 1/18/2016		SeqNo: 964164		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.1	45.66	5.869	98.1	31.2	162			
Surr: DNOP	4.2		4.566		92.3	70	130			

Sample ID	1601570-001AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	Carbon Canister-Soi		Batch ID: 23255		RunNo: 31488					
Prep Date:	1/18/2016		Analysis Date: 1/18/2016		SeqNo: 964165		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.2	46.00	5.869	85.4	31.2	162	11.5	31.7	
Surr: DNOP	4.1		4.600		89.9	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1601570

20-Jan-16

Client: Western Refining Southwest, Gallup

Project: WWTP Carbon Canister Overflow

Sample ID	MB-23266		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965257		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	870		1000		87.2	66.2	112			

Sample ID	LCS-23266		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965258		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	79.6	122			
Surr: BFB	960		1000		95.8	66.2	112			

Sample ID	1601570-002AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	Carbon Canister-Soi		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965259		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.6	23.21	2.096	109	59.3	143			
Surr: BFB	1000		928.5		108	66.2	112			

Sample ID	1601570-002AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	Carbon Canister-Soi		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965260		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.7	23.36	2.096	113	59.3	143	3.89	20	
Surr: BFB	980		934.6		105	66.2	112	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1601570

20-Jan-16

Client: Western Refining Southwest, Gallup

Project: WWTP Carbon Canister Overflow

Sample ID	MB-23266	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batch ID: 23266		RunNo: 31526						
Prep Date:	1/18/2016	Analysis Date: 1/19/2016		SeqNo: 965266		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			

Sample ID	LCS-23266		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965267		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	102	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.5	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID	1601570-001AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	Carbon Canister-Soi		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965268		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.3	0.048	0.9569	0.3813	94.3	71.5	122			
Toluene	1.4	0.048	0.9569	0.5932	86.5	71.2	123			
Ethylbenzene	1.2	0.048	0.9569	0.1038	111	75.2	130			
Xylenes, Total	3.6	0.096	2.871	0.4586	109	72.4	131			
Surr: 4-Bromofluorobenzene	1.1		0.9569		110	80	120			

Sample ID	1601570-001AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	Carbon Canister-Soi		Batch ID: 23266		RunNo: 31526					
Prep Date:	1/18/2016		Analysis Date: 1/19/2016		SeqNo: 965269		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.048	0.9560	0.3813	81.5	71.5	122	10.1	20	
Toluene	1.2	0.048	0.9560	0.5932	64.9	71.2	123	15.8	20	S
Ethylbenzene	0.96	0.048	0.9560	0.1038	89.3	75.2	130	19.8	20	
Xylenes, Total	2.9	0.096	2.868	0.4586	86.1	72.4	131	20.4	20	R
Surr: 4-Bromofluorobenzene	1.0		0.9560		108	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1601570

RcptNo: 1

Received by/date:

JB

01/15/16

Logged By: Ashley Gallegos

1/15/2016 4:06:00 PM

Completed By: Ashley Gallegos

1/16/2016 8:41:00 AM

Reviewed By:

[Signature]

01/18/16

[Signature]

[Signature]

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)
of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

ent: Western - Refining

Gallup Refinery

Billing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

Mail or Fax#: 505 863 0930

JQC Package:

Standard ☐ Level 4 (Full Validation)

Other

EDD (Type)

☐ Standard☒ Rush

Project Name:

WWTP Carbon Canister Overflow

Project #:

WWTP Carbon Canister Overflow

Project Manager:

PO # 20820595

Beck Larsen

Sampler: CTI/John

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Date Time Matrix Sample Request ID

1/13/2016 1:00 Soil Carbon Canister - Soil Sample # 1

1/13/2016 1:12 Soil Carbon Canister - Soil Sample # 2

1/13/2016 1:25 Soil Carbon Canister - Soil Sample # 3

Container Type and #

9 oz - 1

9 oz - 1

9 oz - 1

Preservative Type

N/A

N/A

N/A

HEAL No.

1001570

-001

-002

-003

BTX

x

x

x

BTX + MTBE + TPH (Gas only)

x

x

x

TPH 8015B (GRO / DRO / MRO)

x

x

x

TPH (Method 418.1)

EDB (Method 504.1)

PAH (8310 or 8270SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

RCI

Metals RCRA 8

Air Bubbles (Y or N)

Time: 13:00 Relinquished by: A. Dorsey

Time: 4:06 Relinquished by:

Received by:

Received by:

Date: 1-15-16 Time: 13:00

Date: 1-15-16 Time: 16:06

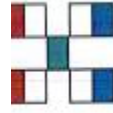
Remarks:

Samples

1 Containment

4th2nd3rd

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



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Appendix I-2
Hall Environmental Analysis Laboratory, Inc.
April 25, 2016
Analytical Report No. 1604730



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

April 25, 2016

Beck Larsen

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

RE: Carbon Canister Overflow

OrderNo.: 1604730

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/15/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1604730**

Date Reported: **4/25/2016**

CLIENT: Western Refining Southwest

Client Sample ID: Carbon Canister Overflow

Project: Carbon Canister Overflow

Collection Date: 4/7/2016 11:15:00 AM

Lab ID: 1604730-001

Matrix: SOIL

Received Date: 4/15/2016 2:05:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH	
Diesel Range Organics (DRO)	ND	3.4	9.4		mg/Kg	1	4/19/2016 10:59:38 AM	24865
Motor Oil Range Organics (MRO)	ND	47	47		mg/Kg	1	4/19/2016 10:59:38 AM	24865
Surr: DNOP	92.6	0	70-130		%Rec	1	4/19/2016 10:59:38 AM	24865
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.68	3.3		mg/Kg	1	4/19/2016 11:01:12 AM	24853
Surr: BFB	94.3	0	80-120		%Rec	1	4/19/2016 11:01:12 AM	24853
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.0067	0.00056	0.033	J	mg/Kg	1	4/21/2016 3:06:17 PM	24916
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	2.2	1.2	2.5	J	mg/Kg	1	4/20/2016 4:34:47 PM	24881
Arsenic	1.6	0.73	2.5	J	mg/Kg	1	4/20/2016 4:34:47 PM	24881
Barium	360	0.097	0.20		mg/Kg	2	4/20/2016 4:36:32 PM	24881
Beryllium	0.77	0.0046	0.15		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Cadmium	ND	0.063	0.10		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Chromium	6.8	0.12	0.30		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Cobalt	3.7	0.038	0.30		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Lead	4.2	0.17	0.25		mg/Kg	1	4/20/2016 5:56:51 PM	24881
Nickel	6.8	0.11	0.50		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Selenium	ND	1.1	2.5		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Silver	ND	0.032	0.25		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Vanadium	14	0.035	2.5		mg/Kg	1	4/20/2016 4:34:47 PM	24881
Zinc	13	0.57	2.5		mg/Kg	1	4/20/2016 4:34:47 PM	24881
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.013	0.017		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Toluene	ND	0.0020	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Ethylbenzene	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Methyl tert-butyl ether (MTBE)	ND	0.010	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2,4-Trimethylbenzene	ND	0.0024	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,3,5-Trimethylbenzene	ND	0.0024	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2-Dichloroethane (EDC)	ND	0.0086	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2-Dibromoethane (EDB)	ND	0.0024	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Naphthalene	ND	0.0052	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1-Methylnaphthalene	ND	0.0074	0.13		mg/Kg	1	4/18/2016 6:33:18 PM	24836
2-Methylnaphthalene	ND	0.0071	0.13		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Acetone	ND	0.043	0.50		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Bromobenzene	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Bromodichloromethane	ND	0.0019	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1604730**

Date Reported: **4/25/2016**

CLIENT: Western Refining Southwest

Client Sample ID: Carbon Canister Overflow

Project: Carbon Canister Overflow

Collection Date: 4/7/2016 11:15:00 AM

Lab ID: 1604730-001

Matrix: SOIL

Received Date: 4/15/2016 2:05:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Bromoform	ND	0.0040	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Bromomethane	ND	0.012	0.099		mg/Kg	1	4/18/2016 6:33:18 PM	24836
2-Butanone	ND	0.019	0.33		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Carbon disulfide	ND	0.011	0.33		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Carbon tetrachloride	ND	0.0022	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Chlorobenzene	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Chloroethane	ND	0.0066	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Chloroform	ND	0.0025	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Chloromethane	ND	0.0029	0.099		mg/Kg	1	4/18/2016 6:33:18 PM	24836
2-Chlorotoluene	ND	0.0024	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
4-Chlorotoluene	ND	0.0029	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
cis-1,2-DCE	ND	0.0019	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
cis-1,3-Dichloropropene	ND	0.0031	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2-Dibromo-3-chloropropane	ND	0.010	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Dibromochloromethane	ND	0.0030	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Dibromomethane	ND	0.0029	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2-Dichlorobenzene	ND	0.0029	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,3-Dichlorobenzene	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,4-Dichlorobenzene	ND	0.0041	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Dichlorodifluoromethane	ND	0.010	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1-Dichloroethane	ND	0.0018	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1-Dichloroethene	ND	0.011	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2-Dichloropropane	ND	0.0028	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,3-Dichloropropane	ND	0.0038	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
2,2-Dichloropropane	ND	0.0019	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1-Dichloropropene	ND	0.0026	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Hexachlorobutadiene	ND	0.0041	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
2-Hexanone	ND	0.018	0.33		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Isopropylbenzene	ND	0.0028	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
4-Isopropyltoluene	ND	0.0030	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
4-Methyl-2-pentanone	ND	0.0097	0.33		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Methylene chloride	0.0097	0.0096	0.099	J	mg/Kg	1	4/18/2016 6:33:18 PM	24836
n-Butylbenzene	ND	0.0029	0.099		mg/Kg	1	4/18/2016 6:33:18 PM	24836
n-Propylbenzene	ND	0.0026	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
sec-Butylbenzene	ND	0.0046	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Styrene	ND	0.0030	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
tert-Butylbenzene	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1,1,2-Tetrachloroethane	ND	0.0032	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1,2,2-Tetrachloroethane	ND	0.0054	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1604730**Date Reported: **4/25/2016****CLIENT:** Western Refining Southwest**Client Sample ID:** Carbon Canister Overflow**Project:** Carbon Canister Overflow**Collection Date:** 4/7/2016 11:15:00 AM**Lab ID:** 1604730-001**Matrix:** SOIL**Received Date:** 4/15/2016 2:05:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Tetrachloroethene (PCE)	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
trans-1,2-DCE	ND	0.0093	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
trans-1,3-Dichloropropene	ND	0.0048	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2,3-Trichlorobenzene	ND	0.0050	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2,4-Trichlorobenzene	ND	0.0035	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1,1-Trichloroethane	ND	0.0020	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,1,2-Trichloroethane	ND	0.0039	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Trichloroethene (TCE)	ND	0.0036	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Trichlorofluoromethane	ND	0.0025	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,2,3-Trichloropropane	ND	0.0057	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Vinyl chloride	ND	0.0027	0.033		mg/Kg	1	4/18/2016 6:33:18 PM	24836
Xylenes, Total	ND	0.0063	0.066		mg/Kg	1	4/18/2016 6:33:18 PM	24836
1,4-Dioxane	ND	0.16	0.33		mg/Kg	1	4/21/2016 10:37:15 AM	A33684
Surr: Dibromofluoromethane	104		70-130		%Rec	1	4/18/2016 6:33:18 PM	24836
Surr: 1,2-Dichloroethane-d4	105		70-130		%Rec	1	4/18/2016 6:33:18 PM	24836
Surr: Toluene-d8	101		70-130		%Rec	1	4/18/2016 6:33:18 PM	24836
Surr: 4-Bromofluorobenzene	106		70-130		%Rec	1	4/18/2016 6:33:18 PM	24836
SM4500-H+B: PH							Analyst: JRR	
pH	8.80	0.100	1.68		pH Units	1	4/19/2016 12:45:00 PM	R33649

Refer to the QC Summary report and 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

Anatek Labs, Inc.

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

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

Batch #: 160419046
Project Name: 1604730

Analytical Results Report

Sample Number	160419046-001	Sampling Date	4/7/2016	Date/Time Received	4/19/2016 11:20 AM
Client Sample ID	1604730-001C / CARBON CANISTER OVERFLOW			Extraction Date	4/21/2016
Matrix	Soil			Sampling Time	11:15 AM
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dichlorobenzene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
1,3-Dichlorobenzene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
1,4-Dichlorobenzene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
1-Methylnaphthalene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
2,4-Dimethylphenol	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
2,4-Dinitrophenol	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
2-Methylnaphthalene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
2-Methylphenol	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
3+4-Methylphenol	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
4-Nitrophenol	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Acenaphthene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Anthracene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Benzo[a]anthracene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Benzo[a]pyrene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Benzo[b]fluoranthene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Benzo[k]fluoranthene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Chrysene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Dibenz[a,h]anthracene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Diethylphthalate	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Dimethylphthalate	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Di-n-butylphthalate	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Fluoranthene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Fluorene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Naphthalene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Phenanthrene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:Cert0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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

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

Batch #: 160419046
Project Name: 1604730

Analytical Results Report

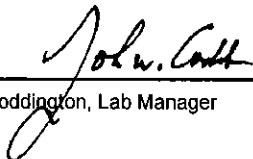
Sample Number	160419046-001	Sampling Date	4/7/2016	Date/Time Received	4/19/2016 11:20 AM
Client Sample ID	1604730-001C / CARBON CANISTER OVERFLOW			Extraction Date	4/21/2016
Matrix	Soil	Sampling Time	11:15 AM		
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Phenol	0.05	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Pyrene	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Pyridine	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	
Quinoline	ND	mg/kg	0.05	4/21/2016	BMM	EPA 8270D	

Surrogate Data

Sample Number	160419046-001		
Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270D	66.2	58-121
2-Fluorobiphenyl	EPA 8270D	83.6	61-121
2-Fluorophenol	EPA 8270D	84.0	53-114
Nitrobenzene-d5	EPA 8270D	57.2	50-121
Phenol-d5	EPA 8270D	88.6	54-120
Terphenyl-d14	EPA 8270D	80.0	55-121

Authorized Signature


John Coddington, Lab Manager

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

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

Anatek Labs, Inc.

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

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

Batch #: 160419046
Project Name: 1604730

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.514	mg/kg	0.5	102.8	90-110	4/21/2016	4/21/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160419046-001	Cyanide	ND	14.1	mg/kg	14.1	100.0	70-130	4/21/2016	4/21/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	13.8	mg/kg	14.1	97.9	2.2	0-25	4/21/2016	4/21/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	0.5	4/21/2016	4/21/2016

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

Comments:

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

Anatek Labs, Inc.

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

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

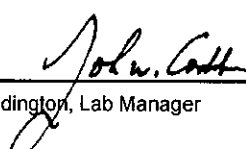
Batch #: 160419046
Project Name: 1604730

Analytical Results Report

Sample Number	160419046-001	Sampling Date	4/7/2016	Date/Time Received	4/19/2016 11:20 AM
Client Sample ID	1604730-001C / CARBON CANISTER OVERFLOW			Sampling Time	11:15 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.282	4/21/2016	MER	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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

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Address: 4901 HAWKINS NE SUITE D
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Attn: ANDY FREEMAN

Batch #: 160419046

Project Name: 1604730

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Pyrene	0.73	mg/kg	1	73.0	68-146	4/21/2016	4/21/2016
Phenol	0.85	mg/kg	1	85.0	37-140	4/21/2016	4/21/2016
bis(2-Ethylhexyl)phthalate	0.73	mg/kg	1	73.0	49-172	4/21/2016	4/21/2016
Acenaphthene	0.73	mg/kg	1	73.0	70-119	4/21/2016	4/21/2016
4-Nitrophenol	0.35	mg/kg	1	35.0	10-115	4/21/2016	4/21/2016
1,4-Dichlorobenzene	0.84	mg/kg	1	84.0	44-115	4/21/2016	4/21/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160419046-001	Pyrene	ND	0.80	mg/kg	1	80.0	78-130	4/21/2016	4/21/2016
160419046-001	bis(2-Ethylhexyl)phthalate	ND	0.81	mg/kg	1	81.0	45-139	4/21/2016	4/21/2016
160419046-001	Acenaphthene	ND	0.78	mg/kg	1	78.0	67-120	4/21/2016	4/21/2016
160419046-001	4-Nitrophenol	ND	0.34	mg/kg	1	34.0	10-120	4/21/2016	4/21/2016
160419046-001	1,4-Dichlorobenzene	ND	0.74	mg/kg	1	74.0	47-120	4/21/2016	4/21/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Pyrene	0.75	mg/kg	1	75.0	6.5	0-43	4/21/2016	4/21/2016
Phenol	0.87	mg/kg	1	82.0	5.6	0-21	4/21/2016	4/21/2016
bis(2-Ethylhexyl)phthalate	0.77	mg/kg	1	77.0	5.1	0-29	4/21/2016	4/21/2016
Acenaphthene	0.74	mg/kg	1	74.0	5.3	0-20	4/21/2016	4/21/2016
4-Nitrophenol	0.24	mg/kg	1	24.0	34.5	0-51	4/21/2016	4/21/2016
1,4-Dichlorobenzene	0.69	mg/kg	1	69.0	7.0	0-64	4/21/2016	4/21/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,2-Dichlorobenzene	ND	mg/kg	0.05	4/21/2016	4/21/2016
1,3-Dichlorobenzene	ND	mg/kg	0.05	4/21/2016	4/21/2016
1,4-Dichlorobenzene	ND	mg/kg	0.05	4/21/2016	4/21/2016
1-Methylnaphthalene	ND	mg/kg	0.05	4/21/2016	4/21/2016
2,4-Dimethylphenol	ND	mg/kg	0.05	4/21/2016	4/21/2016

Comments:

Certifications held by Anatek Labs ID: EPA ID00013, AZ 0701, CC ID00013, FL (NELAP): E87893, ID ID00013, MT: CERT0028, NM: ID00013, OR: ID203001-032, WA: C595
Certifications held by Anatek Labs WA: EPA WA00169, ID WA00169, WA: C585, MT: Cert0095, FL (NELAP): E871099

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

Batch #: 160419046
Project Name: 1604730

Analytical Results Report Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
2,4-Dinitrophenol	ND	mg/kg	0.05	4/21/2016	4/21/2016
2-Methylnaphthalene	ND	mg/kg	0.05	4/21/2016	4/21/2016
2-Methylphenol	ND	mg/kg	0.05	4/21/2016	4/21/2016
3+4-Methylphenol	ND	mg/kg	0.05	4/21/2016	4/21/2016
4-Nitrophenol	ND	mg/kg	0.05	4/21/2016	4/21/2016
Acenaphthene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Anthracene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Benzo[a]anthracene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Benzo[a]pyrene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Benzo[b]fluoranthene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Benzo[k]fluoranthene	ND	mg/kg	0.05	4/21/2016	4/21/2016
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.05	4/21/2016	4/21/2016
Chrysene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Dibenz[a,h]anthracene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Diethylphthalate	ND	mg/kg	0.05	4/21/2016	4/21/2016
Dimethylphthalate	ND	mg/kg	0.05	4/21/2016	4/21/2016
Di-n-butylphthalate	ND	mg/kg	0.05	4/21/2016	4/21/2016
Fluoranthene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Fluorene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Naphthalene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Phenanthrene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Phenol	ND	mg/kg	0.05	4/21/2016	4/21/2016
Pyrene	ND	mg/kg	0.05	4/21/2016	4/21/2016
Pyridine	ND	mg/kg	0.05	4/21/2016	4/21/2016

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

Comments:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	MB-24865		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 24865		RunNo: 33618					
Prep Date:	4/19/2016		Analysis Date: 4/19/2016		SeqNo: 1034542		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	70	130			

Sample ID	LCS-24865		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24865		RunNo: 33618					
Prep Date:	4/19/2016		Analysis Date: 4/19/2016		SeqNo: 1035160		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.2	65.8	136			
Surr: DNOP	4.7		5.000		93.4	70	130			

Sample ID	MB-24846		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 24846		RunNo: 33618					
Prep Date:	4/18/2016		Analysis Date: 4/19/2016		SeqNo: 1035550		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.2		10.00		92.5	70	130			

Sample ID	LCS-24846		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24846		RunNo: 33618					
Prep Date:	4/18/2016		Analysis Date: 4/19/2016		SeqNo: 1035611		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	MB-24836		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 24836		RunNo: 33600					
Prep Date:	4/15/2016		Analysis Date: 4/18/2016		SeqNo: 1033974		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.4	80	120			

Sample ID	LCS-24836		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24836		RunNo: 33600					
Prep Date:	4/15/2016		Analysis Date: 4/18/2016		SeqNo: 1033975		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		100	80	120			

Sample ID	MB-24839	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	24839		RunNo:	33600				
Prep Date:	4/15/2016	Analysis Date:	4/18/2016		SeqNo:	1033995	Units:	%Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.5	80	120			

Sample ID	LCS-24839		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24839		RunNo: 33600					
Prep Date:	4/15/2016		Analysis Date: 4/18/2016		SeqNo: 1033996		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	80	120			

Sample ID	MB-24840		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 24840		RunNo: 33642					
Prep Date:	4/16/2016		Analysis Date: 4/19/2016		SeqNo: 1035835		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.4	80	120			

Sample ID	LCS-24840		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24840		RunNo: 33642					
Prep Date:	4/16/2016		Analysis Date: 4/19/2016		SeqNo: 1035836		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	MB-24853		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 24853		RunNo: 33642					
Prep Date:	4/18/2016		Analysis Date: 4/19/2016		SeqNo: 1035851		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.3	80	120			

Sample ID	LCS-24853		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24853		RunNo: 33642					
Prep Date:	4/18/2016		Analysis Date: 4/19/2016		SeqNo: 1035852		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.8	80	120			
Surr: BFB	1000		1000		101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	mb-24836		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	PBS		Batch ID:	24836		RunNo:	33608			
Prep Date:	4/15/2016		Analysis Date:	4/18/2016		SeqNo:	1034242	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	0.10	0.15								J
2-Butanone	0.052	0.50								J
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	0.014	0.15								J
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.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	mb-24836		SampType: MBLK			TestCode: EPA Method 8260B: Volatiles				
Client ID:	PBS		Batch ID: 24836			RunNo: 33608				
Prep Date:	4/15/2016		Analysis Date: 4/18/2016			SeqNo: 1034242		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	0.016	0.15								J
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	0.52		0.5000		104	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		101	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		105	70	130			

Sample ID	lcs-24836		SampType: LCS			TestCode: EPA Method 8260B: Volatiles				
Client ID:	LCSS		Batch ID: 24836			RunNo: 33608				
Prep Date:	4/15/2016		Analysis Date: 4/18/2016			SeqNo: 1034243		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	108	70	130			
Toluene	1.1	0.050	1.000	0	106	70	130			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	Ics-24836		SampType: LCS		TestCode: EPA Method 8260B: Volatiles					
Client ID:	LCSS		Batch ID: 24836		RunNo: 33608					
Prep Date:	4/15/2016		Analysis Date: 4/18/2016		SeqNo: 1034243		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	107	70	130			
Trichloroethene (TCE)	1.0	0.050	1.000	0	104	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		106	70	130			

Sample ID	1604730-001ams		SampType: MS		TestCode: EPA Method 8260B: Volatiles					
Client ID:	Carbon Canister Ov		Batch ID: 24836		RunNo: 33608					
Prep Date:			Analysis Date: 4/18/2016		SeqNo: 1034246		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.017	0.6627	0	122	49.2	155			
Toluene	0.75	0.033	0.6627	0	114	52	154			
Chlorobenzene	0.74	0.033	0.6627	0	111	53.2	150			
1,1-Dichloroethene	0.82	0.033	0.6627	0	123	34.2	163			
Trichloroethene (TCE)	0.78	0.033	0.6627	0	118	48.2	151			
Surr: Dibromofluoromethane	0.36		0.3314		110	70	130			
Surr: 1,2-Dichloroethane-d4	0.35		0.3314		106	70	130			
Surr: Toluene-d8	0.33		0.3314		99.2	70	130			
Surr: 4-Bromofluorobenzene	0.35		0.3314		106	70	130			

Sample ID	1604730-001amsd		SampType: MSD		TestCode: EPA Method 8260B: Volatiles					
Client ID:	Carbon Canister Ov		Batch ID: 24836		RunNo: 33608					
Prep Date:			Analysis Date: 4/18/2016		SeqNo: 1034247		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.017	0.6627	0	118	49.2	155	3.10	20	
Toluene	0.72	0.033	0.6627	0	109	52	154	4.05	20	
Chlorobenzene	0.71	0.033	0.6627	0	107	53.2	150	4.32	20	
1,1-Dichloroethene	0.79	0.033	0.6627	0	119	34.2	163	3.43	20	
Trichloroethene (TCE)	0.76	0.033	0.6627	0	114	48.2	151	3.53	20	
Surr: Dibromofluoromethane	0.36		0.3314		108	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.34		0.3314		104	70	130	0	0	
Surr: Toluene-d8	0.33		0.3314		99.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.35		0.3314		106	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID:	A33684	RunNo:	33684					
Prep Date:		Analysis Date:	4/21/2016	SeqNo:	1037572	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	0.50								
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.8	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	LCSS	Batch ID:	A33684	RunNo:	33684					
Prep Date:		Analysis Date:	4/21/2016	SeqNo:	1037573	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.51		0.5000		101	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.0	70	130			
Surr: Toluene-d8	0.50		0.5000		99.1	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	MB-24916		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 24916		RunNo: 33692					
Prep Date:	4/20/2016		Analysis Date: 4/21/2016		SeqNo: 1037908		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.0014	0.033								J

Sample ID	LCS-24916		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 24916		RunNo: 33692					
Prep Date:	4/20/2016		Analysis Date: 4/21/2016		SeqNo: 1037909		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	MB-24881		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 24881		RunNo: 33671					
Prep Date:	4/19/2016		Analysis Date: 4/20/2016		SeqNo: 1037003		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	0.052	0.10								J
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Nickel	0.16	0.50								J
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-24881		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 24881		RunNo: 33671					
Prep Date:	4/19/2016		Analysis Date: 4/20/2016		SeqNo: 1037004		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.0	80	120			
Arsenic	24	2.5	25.00	0	94.6	80	120			
Barium	25	0.10	25.00	0	98.0	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	24	0.10	25.00	0	95.8	80	120			
Chromium	24	0.30	25.00	0	96.8	80	120			
Cobalt	24	0.30	25.00	0	94.9	80	120			
Nickel	24	0.50	25.00	0	94.8	80	120			
Selenium	22	2.5	25.00	0	89.8	80	120			
Silver	5.0	0.25	5.000	0	99.1	80	120			
Vanadium	26	2.5	25.00	0	103	80	120			
Zinc	23	2.5	25.00	0	92.7	80	120			

Sample ID	MB-24881		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals				
Client ID:	PBS		Batch ID:	24881		RunNo:	33671				
Prep Date:	4/19/2016		Analysis Date:	4/20/2016		SeqNo:	1037033		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Lead	ND	0.25									

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604730

25-Apr-16

Client: Western Refining Southwest

Project: Carbon Canister Overflow

Sample ID	LCS-24881	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	24881	RunNo:	33671					
Prep Date:	4/19/2016	Analysis Date:	4/20/2016	SeqNo:	1037034	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.25	25.00	0	97.6	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



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: 1604730

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

4/15/2016 2:05:00 PM

Completed By: Ashley Gallegos

4/18/2016 12:10:57 PM

Reviewed By:

IO

04/18/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Appendix I-3
Hall Environmental Analysis Laboratory, Inc.
July 26, 2016
Analytical Report No. 1606819



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

July 26, 2016

Ed Riege

Western Refining Company

Rt. 3 Box 7

Gallup, NM 87301

TEL: (505) 722-0231

FAX

RE: WWTP Carbon Canister Confirmation Sampling

OrderNo.: 1606819

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/15/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-5 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:30:00 AM

Lab ID: 1606819-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	ND	1.8	9.5		mg/Kg	1	6/20/2016 12:59:32 PM	25888
Motor Oil Range Organics (MRO)	ND	48	48		mg/Kg	1	6/20/2016 12:59:32 PM	25888
Surr: DNOP	92.2	0	70-130		%Rec	1	6/20/2016 12:59:32 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.67	3.3		mg/Kg	1	6/23/2016 5:13:27 PM	R35118
Surr: BFB	101	0	80-120		%Rec	1	6/23/2016 5:13:27 PM	R35118
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.011	0.00056	0.033	J	mg/Kg	1	6/24/2016 12:29:20 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Arsenic	1.6	0.73	2.5	J	mg/Kg	1	6/27/2016 12:19:44 PM	26038
Barium	540	0.24	0.50		mg/Kg	5	6/27/2016 2:29:47 PM	26038
Beryllium	0.49	0.0046	0.15		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Cadmium	ND	0.063	0.099		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Chromium	4.8	0.12	0.30		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Cobalt	2.4	0.038	0.30		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Lead	3.3	0.17	0.25		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Nickel	4.1	0.11	0.50		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Selenium	ND	1.1	2.5		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Vanadium	13	0.035	2.5		mg/Kg	1	6/27/2016 12:19:44 PM	26038
Zinc	10	0.57	2.5		mg/Kg	1	6/27/2016 12:19:44 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Acenaphthylene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Aniline	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Anthracene	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Azobenzene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benz(a)anthracene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benzo(a)pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benzo(b)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benzo(g,h,i)perylene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benzo(k)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benzoic acid	ND	0.16	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Benzyl alcohol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Bis(2-chloroethoxy)methane	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Bis(2-chloroethyl)ether	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-5 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:30:00 AM

Lab ID: 1606819-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.16	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4-Bromophenyl phenyl ether	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Butyl benzyl phthalate	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Carbazole	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4-Chloro-3-methylphenol	ND	0.24	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4-Chloroaniline	ND	0.22	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2-Chloronaphthalene	ND	0.16	0.50	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2-Chlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4-Chlorophenyl phenyl ether	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Chrysene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Di-n-butyl phthalate	ND	0.15	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Di-n-octyl phthalate	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Dibenz(a,h)anthracene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Dibenzofuran	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
1,2-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
1,3-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
1,4-Dichlorobenzene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
3,3'-Dichlorobenzidine	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Diethyl phthalate	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Dimethyl phthalate	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,4-Dichlorophenol	ND	0.19	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,4-Dimethylphenol	ND	0.22	0.60	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.12	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,4-Dinitrophenol	ND	0.13	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,4-Dinitrotoluene	ND	0.18	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,6-Dinitrotoluene	ND	0.21	0.99	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Fluoranthene	ND	0.11	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Fluorene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Hexachlorobenzene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Hexachlorobutadiene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Hexachlorocyclopentadiene	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Hexachloroethane	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
1-Methylnaphthalene	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2-Methylnaphthalene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2-Methylphenol	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
3+4-Methylphenol	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
N-Nitrosodi-n-propylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-5 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:30:00 AM

Lab ID: 1606819-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Naphthalene	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2-Nitroaniline	ND	0.21	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
3-Nitroaniline	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4-Nitroaniline	ND	0.14	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Nitrobenzene	ND	0.21	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2-Nitrophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
4-Nitrophenol	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Pentachlorophenol	ND	0.13	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Phenanthrene	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Phenol	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Pyridine	ND	0.16	0.80	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
1,2,4-Trichlorobenzene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,4,5-Trichlorophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
2,4,6-Trichlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 12:00:08 PM	25938
Surr: 2-Fluorophenol	84.7	0	28.3-102	D	%Rec	1	6/22/2016 12:00:08 PM	25938
Surr: Phenol-d5	87.4	0	35.7-103	D	%Rec	1	6/22/2016 12:00:08 PM	25938
Surr: 2,4,6-Tribromophenol	97.2	0	35.2-108	D	%Rec	1	6/22/2016 12:00:08 PM	25938
Surr: Nitrobenzene-d5	94.9		24-118	D	%Rec	1	6/22/2016 12:00:08 PM	25938
Surr: 2-Fluorobiphenyl	104		35.4-111	D	%Rec	1	6/22/2016 12:00:08 PM	25938
Surr: 4-Terphenyl-d14	93.4		15-91.7	SD	%Rec	1	6/22/2016 12:00:08 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Toluene	3.45	0.196	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Ethylbenzene	0.990	0.218	1.62	J	µg/Kg	1	6/24/2016 1:22:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.273	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2,4-Trimethylbenzene	2.17	0.275	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,3,5-Trimethylbenzene	0.746	0.268	1.62	J	µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Naphthalene	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1-Methylnaphthalene	ND	0.184	3.25		µg/Kg	1	6/24/2016 1:22:00 PM	26053
2-Methylnaphthalene	ND	0.427	3.25		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Acetone	12.9	0.480	8.11		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Bromobenzene	ND	0.165	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Bromodichloromethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Bromoform	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Bromomethane	ND	0.292	2.43		µg/Kg	1	6/24/2016 1:22:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-5 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:30:00 AM

Lab ID: 1606819-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.585	8.11		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Carbon disulfide	ND	0.600	8.11		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Carbon tetrachloride	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Chlorobenzene	ND	0.186	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Chloroethane	ND	0.299	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Chloroform	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Chloromethane	ND	0.411	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
2-Chlorotoluene	ND	0.276	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
4-Chlorotoluene	ND	0.270	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
cis-1,2-DCE	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
cis-1,3-Dichloropropene	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.173	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Dibromochloromethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Dibromomethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2-Dichlorobenzene	ND	0.236	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,3-Dichlorobenzene	ND	0.300	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,4-Dichlorobenzene	ND	0.304	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Dichlorodifluoromethane	ND	0.947	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1-Dichloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1-Dichloroethene	ND	0.266	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2-Dichloropropane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,3-Dichloropropane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
2,2-Dichloropropane	ND	0.205	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1-Dichloropropene	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Hexachlorobutadiene	ND	0.370	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
2-Hexanone	ND	0.404	8.11		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Isopropylbenzene	ND	0.204	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
4-Isopropyltoluene	ND	0.304	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
4-Methyl-2-pentanone	ND	3.25	8.11		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Methylene chloride	ND	1.62	2.43		µg/Kg	1	6/24/2016 1:22:00 PM	26053
n-Butylbenzene	ND	0.395	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
n-Propylbenzene	ND	0.290	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
sec-Butylbenzene	ND	0.288	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Styrene	ND	0.207	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
tert-Butylbenzene	ND	0.237	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Tetrachloroethene (PCE)	ND	0.213	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
trans-1,2-DCE	ND	0.164	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-5 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:30:00 AM

Lab ID: 1606819-001

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.196	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.393	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.492	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1,1-Trichloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,1,2-Trichloroethane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Trichloroethene (TCE)	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Trichlorofluoromethane	ND	0.204	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
1,2,3-Trichloropropane	ND	1.62	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Vinyl chloride	ND	0.427	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Xylenes, Total	3.55	0.647	1.62		µg/Kg	1	6/24/2016 1:22:00 PM	26053
Surr: 1,2-Dichloroethane-d4	91.7	0	70-130		%Rec	1	6/24/2016 1:22:00 PM	26053
Surr: 4-Bromofluorobenzene	105	0	70-130		%Rec	1	6/24/2016 1:22:00 PM	26053
Surr: Dibromofluoromethane	78.1	0	70-130		%Rec	1	6/24/2016 1:22:00 PM	26053
Surr: Toluene-d8	106	0	70-130		%Rec	1	6/24/2016 1:22:00 PM	26053

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	D	Sample Diluted Due to Matrix	E	Value above quantitation range
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	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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-6 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:45:00 AM

Lab ID: 1606819-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	16	1.8	9.7		mg/Kg	1	6/20/2016 2:06:13 PM	25888
Motor Oil Range Organics (MRO)	ND	49	49		mg/Kg	1	6/20/2016 2:06:13 PM	25888
Surr: DNOP	90.8	0	70-130		%Rec	1	6/20/2016 2:06:13 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.68	3.3		mg/Kg	1	6/23/2016 5:37:05 PM	R35118
Surr: BFB	97.9	0	80-120		%Rec	1	6/23/2016 5:37:05 PM	R35118
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.031	0.00057	0.033	J	mg/Kg	1	6/24/2016 12:31:07 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Arsenic	ND	3.6	12		mg/Kg	5	7/18/2016 8:54:48 AM	26038
Barium	460	0.097	0.20		mg/Kg	2	6/27/2016 12:25:24 PM	26038
Beryllium	0.41	0.0046	0.15		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Cadmium	ND	0.063	0.099		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Chromium	3.9	0.12	0.30		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Cobalt	2.3	0.038	0.30		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Lead	0.31	0.17	0.25		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Nickel	4.2	0.11	0.50		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Selenium	ND	2.2	5.0		mg/Kg	2	6/27/2016 12:25:24 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Vanadium	9.7	0.035	2.5		mg/Kg	1	6/27/2016 12:23:25 PM	26038
Zinc	13	0.57	2.5		mg/Kg	1	6/27/2016 12:23:25 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Acenaphthylene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Aniline	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Anthracene	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Azobenzene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benz(a)anthracene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benzo(a)pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benzo(b)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benzo(g,h,i)perylene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benzo(k)fluoranthene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benzoic acid	ND	0.16	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Benzyl alcohol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Bis(2-chloroethoxy)methane	ND	0.21	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Bis(2-chloroethyl)ether	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-6 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:45:00 AM

Lab ID: 1606819-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.16	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4-Bromophenyl phenyl ether	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Butyl benzyl phthalate	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Carbazole	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4-Chloro-3-methylphenol	ND	0.24	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4-Chloroaniline	ND	0.22	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2-Chloronaphthalene	ND	0.16	0.50	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2-Chlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4-Chlorophenyl phenyl ether	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Chrysene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Di-n-butyl phthalate	ND	0.15	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Di-n-octyl phthalate	ND	0.17	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Dibenz(a,h)anthracene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Dibenzofuran	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
1,2-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
1,3-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
1,4-Dichlorobenzene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
3,3'-Dichlorobenzidine	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Diethyl phthalate	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Dimethyl phthalate	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,4-Dichlorophenol	ND	0.18	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,4-Dimethylphenol	ND	0.22	0.59	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.12	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,4-Dinitrophenol	ND	0.13	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,4-Dinitrotoluene	ND	0.18	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,6-Dinitrotoluene	ND	0.21	0.99	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Fluoranthene	ND	0.11	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Fluorene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Hexachlorobenzene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Hexachlorobutadiene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Hexachlorocyclopentadiene	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Hexachloroethane	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
1-Methylnaphthalene	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2-Methylnaphthalene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2-Methylphenol	ND	0.17	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
3+4-Methylphenol	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
N-Nitrosodi-n-propylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-6 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:45:00 AM

Lab ID: 1606819-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Naphthalene	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2-Nitroaniline	ND	0.21	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
3-Nitroaniline	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4-Nitroaniline	ND	0.14	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Nitrobenzene	ND	0.20	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2-Nitrophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
4-Nitrophenol	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Pentachlorophenol	ND	0.13	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Phenanthrene	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Phenol	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Pyridine	ND	0.16	0.79	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
1,2,4-Trichlorobenzene	ND	0.21	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,4,5-Trichlorophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
2,4,6-Trichlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:24:16 PM	25938
Surr: 2-Fluorophenol	24.7	0	28.3-102	SD	%Rec	1	6/22/2016 1:24:16 PM	25938
Surr: Phenol-d5	24.2	0	35.7-103	SD	%Rec	1	6/22/2016 1:24:16 PM	25938
Surr: 2,4,6-Tribromophenol	22.9	0	35.2-108	SD	%Rec	1	6/22/2016 1:24:16 PM	25938
Surr: Nitrobenzene-d5	26.9		24-118	D	%Rec	1	6/22/2016 1:24:16 PM	25938
Surr: 2-Fluorobiphenyl	28.3		35.4-111	SD	%Rec	1	6/22/2016 1:24:16 PM	25938
Surr: 4-Terphenyl-d14	24.4		15-91.7	D	%Rec	1	6/22/2016 1:24:16 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Toluene	2.22	0.185	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Ethylbenzene	0.535	0.205	1.53	J	µg/Kg	1	6/24/2016 1:47:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.257	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2,4-Trimethylbenzene	0.986	0.259	1.53	J	µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,3,5-Trimethylbenzene	0.321	0.252	1.53	J	µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Naphthalene	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1-Methylnaphthalene	ND	0.174	3.06		µg/Kg	1	6/24/2016 1:47:00 PM	26053
2-Methylnaphthalene	ND	0.402	3.06		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Acetone	8.32	0.452	7.64		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Bromobenzene	ND	0.155	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Bromodichloromethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Bromoform	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Bromomethane	ND	0.275	2.29		µg/Kg	1	6/24/2016 1:47:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-6 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:45:00 AM

Lab ID: 1606819-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.551	7.64		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Carbon disulfide	ND	0.565	7.64		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Carbon tetrachloride	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Chlorobenzene	ND	0.175	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Chloroethane	ND	0.282	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Chloroform	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Chloromethane	ND	0.387	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
2-Chlorotoluene	ND	0.260	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
4-Chlorotoluene	ND	0.254	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
cis-1,2-DCE	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
cis-1,3-Dichloropropene	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.163	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Dibromochloromethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Dibromomethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2-Dichlorobenzene	ND	0.223	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,3-Dichlorobenzene	ND	0.282	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,4-Dichlorobenzene	ND	0.286	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Dichlorodifluoromethane	ND	0.892	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1-Dichloroethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1-Dichloroethene	ND	0.250	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2-Dichloropropane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,3-Dichloropropane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
2,2-Dichloropropane	ND	0.193	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1-Dichloropropene	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Hexachlorobutadiene	ND	0.348	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
2-Hexanone	ND	0.381	7.64		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Isopropylbenzene	ND	0.192	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
4-Isopropyltoluene	ND	0.287	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
4-Methyl-2-pentanone	ND	3.06	7.64		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Methylene chloride	ND	1.53	2.29		µg/Kg	1	6/24/2016 1:47:00 PM	26053
n-Butylbenzene	ND	0.372	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
n-Propylbenzene	ND	0.274	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
sec-Butylbenzene	ND	0.271	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Styrene	ND	0.195	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
tert-Butylbenzene	ND	0.223	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Tetrachloroethene (PCE)	ND	0.201	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
trans-1,2-DCE	ND	0.154	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-6 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 10:45:00 AM

Lab ID: 1606819-002

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.185	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.370	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.464	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1,1-Trichloroethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,1,2-Trichloroethane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Trichloroethene (TCE)	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Trichlorofluoromethane	ND	0.192	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
1,2,3-Trichloropropane	ND	1.53	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Vinyl chloride	ND	0.402	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Xylenes, Total	1.91	0.609	1.53		µg/Kg	1	6/24/2016 1:47:00 PM	26053
Surr: 1,2-Dichloroethane-d4	97.2	0	70-130		%Rec	1	6/24/2016 1:47:00 PM	26053
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	1	6/24/2016 1:47:00 PM	26053
Surr: Dibromofluoromethane	81.3	0	70-130		%Rec	1	6/24/2016 1:47:00 PM	26053
Surr: Toluene-d8	105	0	70-130		%Rec	1	6/24/2016 1:47:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-7 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:05:00 AM

Lab ID: 1606819-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	ND	1.8	9.5		mg/Kg	1	6/20/2016 2:34:25 PM	25888
Motor Oil Range Organics (MRO)	ND	48	48		mg/Kg	1	6/20/2016 2:34:25 PM	25888
Surr: DNOP	91.7	0	70-130		%Rec	1	6/20/2016 2:34:25 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.77	3.8		mg/Kg	1	6/23/2016 6:00:44 PM	R35118
Surr: BFB	98.6	0	80-120		%Rec	1	6/23/2016 6:00:44 PM	R35118
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.031	0.00057	0.033	J	mg/Kg	1	6/24/2016 12:32:55 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Arsenic	ND	3.6	12		mg/Kg	5	7/18/2016 8:57:18 AM	26038
Barium	470	0.096	0.20		mg/Kg	2	6/27/2016 12:29:20 PM	26038
Beryllium	0.27	0.0046	0.15		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Cadmium	ND	0.063	0.099		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Chromium	2.7	0.12	0.30		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Cobalt	1.6	0.038	0.30		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Lead	ND	0.17	0.25		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Nickel	2.5	0.11	0.50		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Selenium	ND	2.2	5.0		mg/Kg	2	6/27/2016 12:29:20 PM	26038
Silver	ND	0.031	0.25		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Vanadium	9.2	0.035	2.5		mg/Kg	1	6/27/2016 12:27:20 PM	26038
Zinc	5.6	0.57	2.5		mg/Kg	1	6/27/2016 12:27:20 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Acenaphthylene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Aniline	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Anthracene	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Azobenzene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benz(a)anthracene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benzo(a)pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benzo(b)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benzo(g,h,i)perylene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benzo(k)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benzoic acid	ND	0.17	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Benzyl alcohol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Bis(2-chloroethoxy)methane	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Bis(2-chloroethyl)ether	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-7 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:05:00 AM

Lab ID: 1606819-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.16	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4-Bromophenyl phenyl ether	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Butyl benzyl phthalate	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Carbazole	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4-Chloro-3-methylphenol	ND	0.24	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4-Chloroaniline	ND	0.22	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2-Chloronaphthalene	ND	0.16	0.50	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2-Chlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4-Chlorophenyl phenyl ether	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Chrysene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Di-n-butyl phthalate	ND	0.15	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Di-n-octyl phthalate	0.17	0.17	0.80	JD	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Dibenz(a,h)anthracene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Dibenzofuran	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
1,2-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
1,3-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
1,4-Dichlorobenzene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
3,3'-Dichlorobenzidine	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Diethyl phthalate	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Dimethyl phthalate	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,4-Dichlorophenol	ND	0.19	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,4-Dimethylphenol	ND	0.22	0.60	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.12	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,4-Dinitrophenol	ND	0.13	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,4-Dinitrotoluene	ND	0.18	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,6-Dinitrotoluene	ND	0.21	1.0	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Fluoranthene	ND	0.11	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Fluorene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Hexachlorobenzene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Hexachlorobutadiene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Hexachlorocyclopentadiene	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Hexachloroethane	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
1-Methylnaphthalene	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2-Methylnaphthalene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2-Methylphenol	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
3+4-Methylphenol	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
N-Nitrosodi-n-propylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-7 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:05:00 AM

Lab ID: 1606819-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Naphthalene	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2-Nitroaniline	ND	0.21	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
3-Nitroaniline	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4-Nitroaniline	ND	0.14	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Nitrobenzene	ND	0.21	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2-Nitrophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
4-Nitrophenol	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Pentachlorophenol	ND	0.13	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Phenanthrene	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Phenol	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Pyridine	ND	0.16	0.80	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
1,2,4-Trichlorobenzene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,4,5-Trichlorophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
2,4,6-Trichlorophenol	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 1:52:21 PM	25938
Surr: 2-Fluorophenol	79.0	0	28.3-102	D	%Rec	1	6/22/2016 1:52:21 PM	25938
Surr: Phenol-d5	83.4	0	35.7-103	D	%Rec	1	6/22/2016 1:52:21 PM	25938
Surr: 2,4,6-Tribromophenol	76.8	0	35.2-108	D	%Rec	1	6/22/2016 1:52:21 PM	25938
Surr: Nitrobenzene-d5	86.5		24-118	D	%Rec	1	6/22/2016 1:52:21 PM	25938
Surr: 2-Fluorobiphenyl	89.1		35.4-111	D	%Rec	1	6/22/2016 1:52:21 PM	25938
Surr: 4-Terphenyl-d14	66.2		15-91.7	D	%Rec	1	6/22/2016 1:52:21 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Toluene	4.44	0.256	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Ethylbenzene	1.22	0.285	2.12	J	µg/Kg	1	6/24/2016 2:12:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.356	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2,4-Trimethylbenzene	2.87	0.360	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,3,5-Trimethylbenzene	0.944	0.350	2.12	J	µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2-Dichloroethane (EDC)	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2-Dibromoethane (EDB)	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Naphthalene	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1-Methylnaphthalene	ND	0.241	4.24		µg/Kg	1	6/24/2016 2:12:00 PM	26053
2-Methylnaphthalene	ND	0.558	4.24		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Acetone	5.77	0.628	10.6	J	µg/Kg	1	6/24/2016 2:12:00 PM	26053
Bromobenzene	ND	0.216	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Bromodichloromethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Bromoform	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Bromomethane	ND	0.382	3.18		µg/Kg	1	6/24/2016 2:12:00 PM	26053

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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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-7 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:05:00 AM

Lab ID: 1606819-003

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.765	10.6		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Carbon disulfide	ND	0.785	10.6		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Carbon tetrachloride	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Chlorobenzene	ND	0.243	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Chloroethane	ND	0.392	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Chloroform	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Chloromethane	ND	0.537	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
2-Chlorotoluene	ND	0.361	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
4-Chlorotoluene	ND	0.353	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
cis-1,2-DCE	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
cis-1,3-Dichloropropene	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.226	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Dibromochloromethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Dibromomethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2-Dichlorobenzene	ND	0.309	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,3-Dichlorobenzene	ND	0.392	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,4-Dichlorobenzene	ND	0.397	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Dichlorodifluoromethane	ND	1.24	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1-Dichloroethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1-Dichloroethene	ND	0.347	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2-Dichloropropane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,3-Dichloropropane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
2,2-Dichloropropane	ND	0.268	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1-Dichloropropene	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Hexachlorobutadiene	ND	0.484	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
2-Hexanone	ND	0.528	10.6		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Isopropylbenzene	ND	0.267	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
4-Isopropyltoluene	ND	0.398	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
4-Methyl-2-pentanone	ND	4.24	10.6		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Methylene chloride	ND	2.12	3.18		µg/Kg	1	6/24/2016 2:12:00 PM	26053
n-Butylbenzene	ND	0.517	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
n-Propylbenzene	ND	0.380	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
sec-Butylbenzene	ND	0.377	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Styrene	ND	0.271	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
tert-Butylbenzene	ND	0.310	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Tetrachloroethene (PCE)	ND	0.279	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
trans-1,2-DCE	ND	0.214	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company**Client Sample ID:** WWTP-CC-7 (0-6")**Project:** WWTP Carbon Canister Confirmation Sa**Collection Date:** 6/14/2016 11:05:00 AM**Lab ID:** 1606819-003**Matrix:** SOIL**Received Date:** 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.257	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.513	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.643	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1,1-Trichloroethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,1,2-Trichloroethane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Trichloroethene (TCE)	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Trichlorofluoromethane	ND	0.267	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
1,2,3-Trichloropropane	ND	2.12	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Vinyl chloride	ND	0.558	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Xylenes, Total	4.65	0.846	2.12		µg/Kg	1	6/24/2016 2:12:00 PM	26053
Surr: 1,2-Dichloroethane-d4	92.6	0	70-130		%Rec	1	6/24/2016 2:12:00 PM	26053
Surr: 4-Bromofluorobenzene	106	0	70-130		%Rec	1	6/24/2016 2:12:00 PM	26053
Surr: Dibromofluoromethane	80.4	0	70-130		%Rec	1	6/24/2016 2:12:00 PM	26053
Surr: Toluene-d8	111	0	70-130		%Rec	1	6/24/2016 2:12:00 PM	26053

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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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-8 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:35:00 AM

Lab ID: 1606819-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	12	1.9	10		mg/Kg	1	6/20/2016 4:27:34 PM	25888
Motor Oil Range Organics (MRO)	ND	50	50		mg/Kg	1	6/20/2016 4:27:34 PM	25888
Surr: DNOP	93.5	0	70-130		%Rec	1	6/20/2016 4:27:34 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	2.8	0.88	4.3	J	mg/Kg	1	6/23/2016 6:24:20 PM	R35118
Surr: BFB	99.5	0	80-120		%Rec	1	6/23/2016 6:24:20 PM	R35118
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.065	0.00057	0.033		mg/Kg	1	6/24/2016 12:38:25 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Arsenic	ND	7.2	25		mg/Kg	10	6/27/2016 2:31:35 PM	26038
Barium	1400	0.48	0.99		mg/Kg	10	6/27/2016 2:31:35 PM	26038
Beryllium	0.37	0.0046	0.15		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Cadmium	ND	0.063	0.099		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Chromium	4.8	0.12	0.30		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Cobalt	2.2	0.038	0.30		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Lead	0.82	0.17	0.25		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Nickel	3.7	0.11	0.50		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Selenium	ND	2.2	5.0		mg/Kg	2	6/27/2016 12:33:17 PM	26038
Silver	ND	0.031	0.25		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Vanadium	11	0.035	2.5		mg/Kg	1	6/27/2016 12:31:16 PM	26038
Zinc	9.4	0.57	2.5		mg/Kg	1	6/27/2016 12:31:16 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Acenaphthylene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Aniline	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Anthracene	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Azobenzene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benz(a)anthracene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benzo(a)pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benzo(b)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benzo(g,h,i)perylene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benzo(k)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benzoic acid	ND	0.17	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Benzyl alcohol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Bis(2-chloroethoxy)methane	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Bis(2-chloroethyl)ether	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-8 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:35:00 AM

Lab ID: 1606819-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.16	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4-Bromophenyl phenyl ether	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Butyl benzyl phthalate	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Carbazole	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4-Chloro-3-methylphenol	ND	0.24	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4-Chloroaniline	ND	0.22	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2-Chloronaphthalene	ND	0.16	0.50	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2-Chlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4-Chlorophenyl phenyl ether	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Chrysene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Di-n-butyl phthalate	ND	0.15	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Di-n-octyl phthalate	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Dibenz(a,h)anthracene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Dibenzofuran	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
1,2-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
1,3-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
1,4-Dichlorobenzene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
3,3'-Dichlorobenzidine	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Diethyl phthalate	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Dimethyl phthalate	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,4-Dichlorophenol	ND	0.19	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,4-Dimethylphenol	ND	0.22	0.60	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.12	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,4-Dinitrophenol	ND	0.13	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,4-Dinitrotoluene	ND	0.18	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,6-Dinitrotoluene	ND	0.21	1.0	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Fluoranthene	ND	0.12	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Fluorene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Hexachlorobenzene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Hexachlorobutadiene	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Hexachlorocyclopentadiene	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Hexachloroethane	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
1-Methylnaphthalene	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2-Methylnaphthalene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2-Methylphenol	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
3+4-Methylphenol	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
N-Nitrosodi-n-propylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-8 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:35:00 AM

Lab ID: 1606819-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Naphthalene	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2-Nitroaniline	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
3-Nitroaniline	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4-Nitroaniline	ND	0.14	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Nitrobenzene	ND	0.21	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2-Nitrophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
4-Nitrophenol	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Pentachlorophenol	ND	0.13	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Phenanthrene	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Phenol	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Pyridine	ND	0.16	0.80	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
1,2,4-Trichlorobenzene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,4,5-Trichlorophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
2,4,6-Trichlorophenol	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:20:50 PM	25938
Surr: 2-Fluorophenol	65.8	0	28.3-102	D	%Rec	1	6/22/2016 2:20:50 PM	25938
Surr: Phenol-d5	64.8	0	35.7-103	D	%Rec	1	6/22/2016 2:20:50 PM	25938
Surr: 2,4,6-Tribromophenol	65.9	0	35.2-108	D	%Rec	1	6/22/2016 2:20:50 PM	25938
Surr: Nitrobenzene-d5	71.3		24-118	D	%Rec	1	6/22/2016 2:20:50 PM	25938
Surr: 2-Fluorobiphenyl	71.6		35.4-111	D	%Rec	1	6/22/2016 2:20:50 PM	25938
Surr: 4-Terphenyl-d14	59.2		15-91.7	D	%Rec	1	6/22/2016 2:20:50 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Toluene	4.11	0.207	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Ethylbenzene	1.25	0.230	1.71	J	µg/Kg	1	6/24/2016 2:37:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.287	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2,4-Trimethylbenzene	2.75	0.290	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,3,5-Trimethylbenzene	0.967	0.282	1.71	J	µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Naphthalene	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1-Methylnaphthalene	ND	0.195	3.42		µg/Kg	1	6/24/2016 2:37:00 PM	26053
2-Methylnaphthalene	ND	0.450	3.42		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Acetone	9.91	0.506	8.56		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Bromobenzene	ND	0.174	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Bromodichloromethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Bromoform	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Bromomethane	ND	0.308	2.57		µg/Kg	1	6/24/2016 2:37:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-8 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:35:00 AM

Lab ID: 1606819-004

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.617	8.56		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Carbon disulfide	ND	0.633	8.56		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Carbon tetrachloride	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Chlorobenzene	ND	0.196	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Chloroethane	ND	0.316	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Chloroform	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Chloromethane	ND	0.434	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
2-Chlorotoluene	ND	0.291	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
4-Chlorotoluene	ND	0.284	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
cis-1,2-DCE	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
cis-1,3-Dichloropropene	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.182	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Dibromochloromethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Dibromomethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2-Dichlorobenzene	ND	0.249	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,3-Dichlorobenzene	ND	0.316	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,4-Dichlorobenzene	ND	0.320	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Dichlorodifluoromethane	ND	0.999	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1-Dichloroethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1-Dichloroethene	ND	0.280	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2-Dichloropropane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,3-Dichloropropane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
2,2-Dichloropropane	ND	0.216	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1-Dichloropropene	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Hexachlorobutadiene	ND	0.390	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
2-Hexanone	ND	0.426	8.56		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Isopropylbenzene	ND	0.215	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
4-Isopropyltoluene	ND	0.321	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
4-Methyl-2-pentanone	ND	3.42	8.56		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Methylene chloride	ND	1.71	2.57		µg/Kg	1	6/24/2016 2:37:00 PM	26053
n-Butylbenzene	ND	0.417	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
n-Propylbenzene	ND	0.306	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
sec-Butylbenzene	ND	0.304	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Styrene	ND	0.219	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
tert-Butylbenzene	ND	0.250	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Tetrachloroethene (PCE)	ND	0.225	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
trans-1,2-DCE	ND	0.173	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company**Client Sample ID:** WWTP-CC-8 (0-6")**Project:** WWTP Carbon Canister Confirmation Sa**Collection Date:** 6/14/2016 11:35:00 AM**Lab ID:** 1606819-004**Matrix:** SOIL**Received Date:** 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.207	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.414	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.519	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1,1-Trichloroethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,1,2-Trichloroethane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Trichloroethene (TCE)	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Trichlorofluoromethane	ND	0.215	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
1,2,3-Trichloropropane	ND	1.71	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Vinyl chloride	ND	0.450	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Xylenes, Total	4.53	0.682	1.71		µg/Kg	1	6/24/2016 2:37:00 PM	26053
Surr: 1,2-Dichloroethane-d4	94.8	0	70-130		%Rec	1	6/24/2016 2:37:00 PM	26053
Surr: 4-Bromofluorobenzene	109	0	70-130		%Rec	1	6/24/2016 2:37:00 PM	26053
Surr: Dibromofluoromethane	78.6	0	70-130		%Rec	1	6/24/2016 2:37:00 PM	26053
Surr: Toluene-d8	107	0	70-130		%Rec	1	6/24/2016 2:37:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-9 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:55:00 AM

Lab ID: 1606819-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME	
Diesel Range Organics (DRO)	6.9	1.7	9.3	J	mg/Kg	1	6/20/2016 3:02:37 PM	25888
Motor Oil Range Organics (MRO)	ND	47	47		mg/Kg	1	6/20/2016 3:02:37 PM	25888
Surr: DNOP	93.2	0	70-130		%Rec	1	6/20/2016 3:02:37 PM	25888
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA	
Gasoline Range Organics (GRO)	ND	0.81	3.9		mg/Kg	1	6/23/2016 6:47:50 PM	R35118
Surr: BFB	97.2	0	80-120		%Rec	1	6/23/2016 6:47:50 PM	R35118
EPA METHOD 7471: MERCURY							Analyst: pmf	
Mercury	0.028	0.00056	0.032	J	mg/Kg	1	6/24/2016 12:40:14 PM	26037
EPA METHOD 6010B: SOIL METALS							Analyst: MED	
Antimony	ND	1.2	2.5		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Arsenic	ND	3.7	13		mg/Kg	5	6/27/2016 2:33:27 PM	26038
Barium	760	0.24	0.50		mg/Kg	5	6/27/2016 2:33:27 PM	26038
Beryllium	0.36	0.0046	0.15		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Cadmium	ND	0.064	0.10		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Chromium	3.6	0.13	0.30		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Cobalt	2.0	0.038	0.30		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Lead	0.24	0.18	0.25	J	mg/Kg	1	6/27/2016 12:35:07 PM	26038
Nickel	3.4	0.11	0.50		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Selenium	ND	2.2	5.0		mg/Kg	2	6/27/2016 12:37:06 PM	26038
Silver	ND	0.032	0.25		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Vanadium	12	0.035	2.5		mg/Kg	1	6/27/2016 12:35:07 PM	26038
Zinc	9.2	0.57	2.5		mg/Kg	1	6/27/2016 12:35:07 PM	26038
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Acenaphthylene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Aniline	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Anthracene	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Azobenzene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benz(a)anthracene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benzo(a)pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benzo(b)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benzo(g,h,i)perylene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benzo(k)fluoranthene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benzoic acid	ND	0.17	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Benzyl alcohol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Bis(2-chloroethoxy)methane	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Bis(2-chloroethyl)ether	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938

Refer to the QC Summary report and 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 Company

Client Sample ID: WWTP-CC-9 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:55:00 AM

Lab ID: 1606819-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Bis(2-chloroisopropyl)ether	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Bis(2-ethylhexyl)phthalate	ND	0.16	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4-Bromophenyl phenyl ether	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Butyl benzyl phthalate	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Carbazole	ND	0.13	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4-Chloro-3-methylphenol	ND	0.24	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4-Chloroaniline	ND	0.22	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2-Chloronaphthalene	ND	0.16	0.50	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2-Chlorophenol	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4-Chlorophenyl phenyl ether	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Chrysene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Di-n-butyl phthalate	ND	0.15	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Di-n-octyl phthalate	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Dibenz(a,h)anthracene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Dibenzofuran	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
1,2-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
1,3-Dichlorobenzene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
1,4-Dichlorobenzene	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
3,3'-Dichlorobenzidine	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Diethyl phthalate	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Dimethyl phthalate	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,4-Dichlorophenol	ND	0.19	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,4-Dimethylphenol	ND	0.22	0.60	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4,6-Dinitro-2-methylphenol	ND	0.12	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,4-Dinitrophenol	ND	0.13	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,4-Dinitrotoluene	ND	0.18	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,6-Dinitrotoluene	ND	0.21	1.0	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Fluoranthene	ND	0.11	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Fluorene	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Hexachlorobenzene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Hexachlorobutadiene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Hexachlorocyclopentadiene	ND	0.23	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Hexachloroethane	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Indeno(1,2,3-cd)pyrene	ND	0.16	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
1-Methylnaphthalene	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2-Methylnaphthalene	ND	0.24	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2-Methylphenol	ND	0.17	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
3+4-Methylphenol	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
N-Nitrosodi-n-propylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-9 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:55:00 AM

Lab ID: 1606819-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
N-Nitrosodiphenylamine	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Naphthalene	ND	0.19	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2-Nitroaniline	ND	0.21	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
3-Nitroaniline	ND	0.18	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4-Nitroaniline	ND	0.14	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Nitrobenzene	ND	0.21	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2-Nitrophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
4-Nitrophenol	ND	0.15	0.50	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Pentachlorophenol	ND	0.13	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Phenanthrene	ND	0.14	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Phenol	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Pyrene	ND	0.15	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Pyridine	ND	0.16	0.80	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
1,2,4-Trichlorobenzene	ND	0.22	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,4,5-Trichlorophenol	ND	0.20	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
2,4,6-Trichlorophenol	ND	0.17	0.40	D	mg/Kg	1	6/22/2016 2:49:03 PM	25938
Surr: 2-Fluorophenol	72.9	0	28.3-102	D	%Rec	1	6/22/2016 2:49:03 PM	25938
Surr: Phenol-d5	82.0	0	35.7-103	D	%Rec	1	6/22/2016 2:49:03 PM	25938
Surr: 2,4,6-Tribromophenol	92.9	0	35.2-108	D	%Rec	1	6/22/2016 2:49:03 PM	25938
Surr: Nitrobenzene-d5	84.4		24-118	D	%Rec	1	6/22/2016 2:49:03 PM	25938
Surr: 2-Fluorobiphenyl	92.2		35.4-111	D	%Rec	1	6/22/2016 2:49:03 PM	25938
Surr: 4-Terphenyl-d14	75.8		15-91.7	D	%Rec	1	6/22/2016 2:49:03 PM	25938
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
Benzene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Toluene	3.33	0.200	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Ethylbenzene	0.952	0.222	1.66	J	µg/Kg	1	6/24/2016 3:02:00 PM	26053
Methyl tert-butyl ether (MTBE)	ND	0.278	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2,4-Trimethylbenzene	2.08	0.281	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,3,5-Trimethylbenzene	0.654	0.273	1.66	J	µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2-Dichloroethane (EDC)	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2-Dibromoethane (EDB)	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Naphthalene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1-Methylnaphthalene	ND	0.188	3.31		µg/Kg	1	6/24/2016 3:02:00 PM	26053
2-Methylnaphthalene	ND	0.436	3.31		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Acetone	5.31	0.490	8.28	J	µg/Kg	1	6/24/2016 3:02:00 PM	26053
Bromobenzene	ND	0.168	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Bromodichloromethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Bromoform	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Bromomethane	ND	0.298	2.48		µg/Kg	1	6/24/2016 3:02:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-9 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:55:00 AM

Lab ID: 1606819-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
2-Butanone	ND	0.597	8.28		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Carbon disulfide	ND	0.612	8.28		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Carbon tetrachloride	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Chlorobenzene	ND	0.190	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Chloroethane	ND	0.306	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Chloroform	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Chloromethane	ND	0.419	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
2-Chlorotoluene	ND	0.282	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
4-Chlorotoluene	ND	0.275	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
cis-1,2-DCE	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
cis-1,3-Dichloropropene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2-Dibromo-3-chloropropane	ND	0.176	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Dibromochloromethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Dibromomethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2-Dichlorobenzene	ND	0.241	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,3-Dichlorobenzene	ND	0.306	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,4-Dichlorobenzene	ND	0.310	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Dichlorodifluoromethane	ND	0.967	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1-Dichloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1-Dichloroethene	ND	0.271	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2-Dichloropropane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,3-Dichloropropane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
2,2-Dichloropropane	ND	0.209	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1-Dichloropropene	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Hexachlorobutadiene	ND	0.377	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
2-Hexanone	ND	0.412	8.28		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Isopropylbenzene	ND	0.208	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
4-Isopropyltoluene	ND	0.311	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
4-Methyl-2-pentanone	ND	3.31	8.28		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Methylene chloride	ND	1.66	2.48		µg/Kg	1	6/24/2016 3:02:00 PM	26053
n-Butylbenzene	ND	0.403	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
n-Propylbenzene	ND	0.296	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
sec-Butylbenzene	ND	0.294	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Styrene	ND	0.212	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
tert-Butylbenzene	ND	0.242	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1,1,2-Tetrachloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1,2,2-Tetrachloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Tetrachloroethene (PCE)	ND	0.218	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
trans-1,2-DCE	ND	0.167	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: WWTP-CC-9 (0-6")

Project: WWTP Carbon Canister Confirmation Sa

Collection Date: 6/14/2016 11:55:00 AM

Lab ID: 1606819-005

Matrix: SOIL

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
METHOD 8260B/5035LOW: VOLATILES							Analyst: BCN	
trans-1,3-Dichloropropene	ND	0.200	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2,3-Trichlorobenzene	ND	0.401	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2,4-Trichlorobenzene	ND	0.502	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1,1-Trichloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,1,2-Trichloroethane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Trichloroethene (TCE)	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Trichlorofluoromethane	ND	0.208	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
1,2,3-Trichloropropane	ND	1.66	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Vinyl chloride	ND	0.436	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Xylenes, Total	3.39	0.660	1.66		µg/Kg	1	6/24/2016 3:02:00 PM	26053
Surr: 1,2-Dichloroethane-d4	95.7	0	70-130		%Rec	1	6/24/2016 3:02:00 PM	26053
Surr: 4-Bromofluorobenzene	108	0	70-130		%Rec	1	6/24/2016 3:02:00 PM	26053
Surr: Dibromofluoromethane	78.5	0	70-130		%Rec	1	6/24/2016 3:02:00 PM	26053
Surr: Toluene-d8	106	0	70-130		%Rec	1	6/24/2016 3:02:00 PM	26053

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: MEOH BLANK

Project: WWTP Carbon Canister Confirmation Sa

Collection Date:

Lab ID: 1606819-006

Matrix: MEOH BLAN

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.020	0.025		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Toluene	ND	0.0030	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Ethylbenzene	ND	0.0041	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Methyl tert-butyl ether (MTBE)	ND	0.016	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2,4-Trimethylbenzene	ND	0.0037	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,3,5-Trimethylbenzene	ND	0.0036	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2-Dichloroethane (EDC)	ND	0.013	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2-Dibromoethane (EDB)	ND	0.0036	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Naphthalene	ND	0.0078	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1-Methylnaphthalene	ND	0.011	0.20		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
2-Methylnaphthalene	ND	0.011	0.20		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Acetone	ND	0.065	0.75		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Bromobenzene	ND	0.0040	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Bromodichloromethane	ND	0.0029	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Bromoform	ND	0.0061	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Bromomethane	0.027	0.018	0.15	J	mg/Kg	1	6/29/2016 4:20:47 PM	D35309
2-Butanone	0.052	0.029	0.50	J	mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Carbon disulfide	ND	0.017	0.50		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Carbon tetrachloride	ND	0.0033	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Chlorobenzene	ND	0.0041	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Chloroethane	ND	0.010	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Chloroform	ND	0.0038	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Chloromethane	0.063	0.0044	0.15	J	mg/Kg	1	6/29/2016 4:20:47 PM	D35309
2-Chlorotoluene	ND	0.0037	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
4-Chlorotoluene	ND	0.0044	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
cis-1,2-DCE	ND	0.0029	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
cis-1,3-Dichloropropene	ND	0.0046	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2-Dibromo-3-chloropropane	ND	0.015	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Dibromochloromethane	ND	0.0045	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Dibromomethane	ND	0.0043	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2-Dichlorobenzene	ND	0.0044	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,3-Dichlorobenzene	ND	0.0041	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,4-Dichlorobenzene	ND	0.0062	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Dichlorodifluoromethane	ND	0.015	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,1-Dichloroethane	ND	0.0027	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,1-Dichloroethene	ND	0.016	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2-Dichloropropane	ND	0.0042	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,3-Dichloropropane	ND	0.0057	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
2,2-Dichloropropane	ND	0.0029	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309

Refer to the QC Summary report and 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.

Analytical Report

Lab Order **1606819**

Date Reported: 7/26/2016

CLIENT: Western Refining Company

Client Sample ID: MEOH BLANK

Project: WWTP Carbon Canister Confirmation Sa

Collection Date:

Lab ID: 1606819-006

Matrix: MEOH BLAN

Received Date: 6/15/2016 8:10:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,1-Dichloropropene	ND	0.0040	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Hexachlorobutadiene	ND	0.0061	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
2-Hexanone	ND	0.027	0.50		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Isopropylbenzene	ND	0.0043	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
4-Isopropyltoluene	ND	0.0045	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
4-Methyl-2-pentanone	ND	0.015	0.50		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Methylene chloride	ND	0.014	0.15		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
n-Butylbenzene	ND	0.0044	0.15		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
n-Propylbenzene	ND	0.0038	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
sec-Butylbenzene	ND	0.0069	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Styrene	ND	0.0045	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
tert-Butylbenzene	ND	0.0041	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,1,1,2-Tetrachloroethane	ND	0.0048	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,1,2,2-Tetrachloroethane	ND	0.0081	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Tetrachloroethene (PCE)	ND	0.0041	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
trans-1,2-DCE	ND	0.014	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
trans-1,3-Dichloropropene	ND	0.0073	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2,3-Trichlorobenzene	ND	0.0075	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2,4-Trichlorobenzene	ND	0.0053	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,1,1-Trichloroethane	ND	0.0031	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,1,2-Trichloroethane	ND	0.0059	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Trichloroethene (TCE)	ND	0.0054	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Trichlorofluoromethane	ND	0.0037	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
1,2,3-Trichloropropane	ND	0.0086	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Vinyl chloride	ND	0.0041	0.050		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Xylenes, Total	ND	0.0095	0.10		mg/Kg	1	6/29/2016 4:20:47 PM	D35309
Surr: Dibromofluoromethane	104		70-130		%Rec	1	6/29/2016 4:20:47 PM	D35309
Surr: 1,2-Dichloroethane-d4	109		70-130		%Rec	1	6/29/2016 4:20:47 PM	D35309
Surr: Toluene-d8	93.8		70-130		%Rec	1	6/29/2016 4:20:47 PM	D35309
Surr: 4-Bromofluorobenzene	96.5		70-130		%Rec	1	6/29/2016 4:20:47 PM	D35309

Refer to the QC Summary report and 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

Anatek Labs, Inc.

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

Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 160617018
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1606819
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number 160617018-001 **Sampling Date** 6/14/2016 **Date/Time Received** 6/17/2016 12:00 PM
Client Sample ID 1606819-001C / WWTP-CC-5 (0-6) **Sampling Time** 10:30 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.256	6/23/2016	MER	EPA 335.4	
%moisture	4.6	Percent		6/22/2016	MER	%moisture	

Sample Number 160617018-002 **Sampling Date** 6/14/2016 **Date/Time Received** 6/17/2016 12:00 PM
Client Sample ID 1606819-002C / WWTP-CC-6 (0-6) **Sampling Time** 10:45 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.259	6/23/2016	MER	EPA 335.4	
%moisture	3.7	Percent		6/22/2016	MER	%moisture	

Sample Number 160617018-003 **Sampling Date** 6/14/2016 **Date/Time Received** 6/17/2016 12:00 PM
Client Sample ID 1606819-003C / WWTP-CC-7 (0-6) **Sampling Time** 11:05 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.239	6/23/2016	MER	EPA 335.4	
%moisture	2.7	Percent		6/22/2016	MER	%moisture	

Anatek Labs, Inc.

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

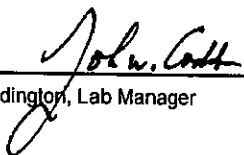
Batch #: 160617018
Project Name: 1606819

Analytical Results Report

Sample Number	160617018-004	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM	
Client Sample ID	1606819-004C / WWTP-CC-8 (0-6)			Sampling Time	11:35 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.233	6/23/2016	MER	EPA 335.4	
%moisture	3.8	Percent		6/22/2016	MER	%moisture	

Sample Number	160617018-005	Sampling Date	6/14/2016	Date/Time Received	6/17/2016	12:00 PM
Client Sample ID	1606819-005C / WWTP-CC-9 (0-6)			Sampling Time	11:55 AM	
Matrix	Soil	Sample Location				
Comments						
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method
Cyanide	ND	mg/Kg	0.253	6/23/2016	MER	EPA 335.4
%moisture	2.5	Percent		6/22/2016	MER	%moisture

Authorized Signature


John Coddington, Lab Manager

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

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

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

Wednesday, July 06, 2016

Page 2 of 2

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

Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 160617018
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1606819
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.489	mg/kg	0.5	97.8	90-110	6/23/2016	6/23/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160617018-001	Cyanide	ND	12.4	mg/kg	12.8	96.9	70-130	6/23/2016	6/23/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	11.9	mg/kg	12.8	93.0	4.1	0-25	6/23/2016	6/23/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	0.5	6/23/2016	6/23/2016

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

Comments:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	MB-25888	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 25888			RunNo: 35005					
Prep Date:	6/16/2016	Analysis Date: 6/20/2016			SeqNo: 1082125		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.4	70	130			

Sample ID	LCS-25888		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 25888		RunNo: 35005					
Prep Date:	6/16/2016		Analysis Date: 6/20/2016		SeqNo: 1082126		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.2	62.6	124			
Surr: DNOP	4.5		5.000		90.3	70	130			

Sample ID	1606819-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	WWTP-CC-5 (0-6")		Batch ID: 25888		RunNo: 35006					
Prep Date:	6/16/2016		Analysis Date: 6/20/2016		SeqNo: 1082988		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.3	46.55	0	113	33.9	141			
Surr: DNOP	4.5		4.655		95.8	70	130			

Sample ID	1606819-001AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	WWTP-CC-5 (0-6")		Batch ID: 25888		RunNo: 35006					
Prep Date:	6/16/2016		Analysis Date: 6/20/2016		SeqNo: 1082989		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.6	47.94	0	111	33.9	141	1.24	20	
Surr: DNOP	4.6		4.794		96.8	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R35118	RunNo:	35118					
Prep Date:		Analysis Date:	6/23/2016	SeqNo:	1086551	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	990		1000		99.1	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R35118	RunNo:	35118					
Prep Date:		Analysis Date:	6/23/2016	SeqNo:	1087474	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.1	80	120			
Surr: BFB	1100		1000		114	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID: D35309			RunNo: 35309					
Prep Date:		Analysis Date: 6/29/2016			SeqNo: 1092894	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	0.024	0.20								J
2-Methylnaphthalene	0.016	0.20								J
Acetone	0.088	0.75								J
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	0.021	0.050								J
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.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles					
Client ID:	PBS	Batch ID: D35309			RunNo: 35309					
Prep Date:		Analysis Date: 6/29/2016			SeqNo: 1092894		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	0.0075	0.10								J
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	0.51		0.5000		101	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.49		0.5000		97.3	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		97.0	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: Volatiles					
Client ID:	LCSS	Batch ID: D35309			RunNo: 35309					
Prep Date:		Analysis Date: 6/29/2016			SeqNo: 1092900		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	70	130			
Toluene	0.87	0.050	1.000	0	87.2	70	130			
Chlorobenzene	0.89	0.050	1.000	0	88.7	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#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles					
Client ID:	LCSS	Batch ID:	D35309	RunNo:	35309					
Prep Date:		Analysis Date:	6/29/2016	SeqNo:	1092900	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.97	0.050	1.000	0	96.8	70	130			
Trichloroethene (TCE)	1.0	0.050	1.000	0	101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.47		0.5000		94.1	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	mb-26053	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	26053	RunNo:	35168					
Prep Date:	6/24/2016	Analysis Date:	6/24/2016	SeqNo:	1087841	Units:	µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.00								
Toluene	ND	2.00								
Ethylbenzene	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	2.00								
1,2,4-Trimethylbenzene	ND	2.00								
1,3,5-Trimethylbenzene	ND	2.00								
1,2-Dichloroethane (EDC)	ND	2.00								
1,2-Dibromoethane (EDB)	ND	2.00								
Naphthalene	ND	2.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	2.00								
Bromodichloromethane	ND	2.00								
Bromoform	ND	2.00								
Bromomethane	ND	3.00								
2-Butanone	ND	10.0								
Carbon disulfide	ND	10.0								
Carbon tetrachloride	ND	2.00								
Chlorobenzene	ND	2.00								
Chloroethane	ND	2.00								
Chloroform	ND	2.00								
Chloromethane	ND	2.00								
2-Chlorotoluene	ND	2.00								
4-Chlorotoluene	ND	2.00								
cis-1,2-DCE	ND	2.00								
cis-1,3-Dichloropropene	ND	2.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	2.00								
Dibromomethane	ND	2.00								
1,2-Dichlorobenzene	ND	2.00								
1,3-Dichlorobenzene	ND	2.00								
1,4-Dichlorobenzene	ND	2.00								
Dichlorodifluoromethane	ND	2.00								
1,1-Dichloroethane	ND	2.00								
1,1-Dichloroethene	ND	2.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	2.00								
2,2-Dichloropropane	ND	2.00								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	mb-26053		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	26053		RunNo:	35168			
Prep Date:	6/24/2016		Analysis Date:	6/24/2016		SeqNo:	1087841	Units:	µg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	2.00								
Hexachlorobutadiene	ND	2.00								
2-Hexanone	ND	10.0								
Isopropylbenzene	ND	2.00								
4-Isopropyltoluene	ND	2.00								
4-Methyl-2-pentanone	ND	10.0								
Methylene chloride	ND	3.00								
n-Butylbenzene	ND	2.00								
n-Propylbenzene	ND	2.00								
sec-Butylbenzene	ND	2.00								
Styrene	ND	2.00								
tert-Butylbenzene	ND	2.00								
1,1,1,2-Tetrachloroethane	ND	2.00								
1,1,2,2-Tetrachloroethane	ND	2.00								
Tetrachloroethene (PCE)	ND	2.00								
trans-1,2-DCE	ND	2.00								
trans-1,3-Dichloropropene	ND	2.00								
1,2,3-Trichlorobenzene	ND	2.00								
1,2,4-Trichlorobenzene	ND	2.00								
1,1,1-Trichloroethane	ND	2.00								
1,1,2-Trichloroethane	ND	2.00								
Trichloroethene (TCE)	ND	2.00								
Trichlorofluoromethane	ND	2.00								
1,2,3-Trichloropropane	ND	2.00								
Vinyl chloride	ND	2.00								
Xylenes, Total	ND	2.00								
Surr: 1,2-Dichloroethane-d4	8.40		10.00		84.0	70	130			
Surr: 4-Bromofluorobenzene	9.89		10.00		98.9	70	130			
Surr: Dibromofluoromethane	7.83		10.00		78.3	70	130			
Surr: Toluene-d8	10.3		10.00		103	70	130			

Sample ID	lcs-26053		SampType:	LCS		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	LCSS		Batch ID:	26053		RunNo:	35168			
Prep Date:	6/24/2016		Analysis Date:	6/24/2016		SeqNo:	1087842	Units:	µg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.28	2.00	10.00	0	82.8	70	130			
Toluene	9.95	2.00	10.00	0	99.5	70	130			
Chlorobenzene	10.6	2.00	10.00	0	106	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	Ics-26053		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 26053		RunNo: 35168					
Prep Date:	6/24/2016		Analysis Date: 6/24/2016		SeqNo: 1087842		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	8.67	2.00	10.00	0	86.7	68	129			
Trichloroethene (TCE)	8.24	2.00	10.00	0	82.4	70	130			
Surr: 1,2-Dichloroethane-d4	8.57		10.00		85.7	70	130			
Surr: 4-Bromofluorobenzene	9.53		10.00		95.3	70	130			
Surr: Dibromofluoromethane	7.80		10.00		78.0	70	130			
Surr: Toluene-d8	9.95		10.00		99.5	70	130			

Sample ID	Icsd-26053		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 26053		RunNo: 35168					
Prep Date:	6/24/2016		Analysis Date: 6/24/2016		SeqNo: 1087843		Units: µg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.09	2.00	10.00	0	80.9	70	130			
Toluene	10.3	2.00	10.00	0	103	70	130			
Chlorobenzene	10.4	2.00	10.00	0	104	70	130			
1,1-Dichloroethene	8.53	2.00	10.00	0	85.3	68	129			
Trichloroethene (TCE)	8.17	2.00	10.00	0	81.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.37		10.00		83.7	70	130			
Surr: 4-Bromofluorobenzene	9.94		10.00		99.4	70	130			
Surr: Dibromofluoromethane	7.75		10.00		77.5	70	130			
Surr: Toluene-d8	10.3		10.00		103	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#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	mb-25938	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	25938	RunNo:	35080					
Prep Date:	6/20/2016	Analysis Date:	6/22/2016	SeqNo:	1084875	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	0.097	0.50								J
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.40								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	0.15	0.20								J
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.40								
2,4-Dinitrophenol	0.078	0.50								J

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	mb-25938		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 25938		RunNo: 35080					
Prep Date:	6/20/2016		Analysis Date: 6/22/2016		SeqNo: 1084875		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.40								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.40								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.40								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2-Fluorophenol	2.6		3.330		77.6	28.3	102			
Surr: Phenol-d5	2.4		3.330		73.2	35.7	103			
Surr: 2,4,6-Tribromophenol	3.0		3.330		90.8	35.2	108			
Surr: Nitrobenzene-d5	1.4		1.670		82.7	24	118			
Surr: 2-Fluorobiphenyl	1.5		1.670		91.1	35.4	111			
Surr: 4-Terphenyl-d14	0.95		1.670		56.9	15	91.7			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	Ics-25938		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 25938		RunNo: 35080					
Prep Date:	6/20/2016		Analysis Date: 6/22/2016		SeqNo: 1084876		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.1	0.20	1.670	0	65.6	45.8	99.8			
4-Chloro-3-methylphenol	2.1	0.50	3.330	0	62.4	51.5	103			
2-Chlorophenol	2.1	0.20	3.330	0	62.3	46.5	105			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	60.1	45.5	103			
2,4-Dinitrotoluene	0.97	0.50	1.670	0	58.3	36	87.2			
N-Nitrosodi-n-propylamine	0.96	0.20	1.670	0	57.4	47.3	104			
4-Nitrophenol	1.9	0.25	3.330	0	58.5	47.3	95.3			
Pentachlorophenol	1.9	0.40	3.330	0	55.8	38.7	89.3			
Phenol	2.0	0.20	3.330	0	60.2	47.8	106			
Pyrene	0.99	0.20	1.670	0	59.3	33.4	105			
1,2,4-Trichlorobenzene	1.0	0.20	1.670	0	62.4	50.4	115			
Surr: 2-Fluorophenol	2.0		3.330		61.2	28.3	102			
Surr: Phenol-d5	2.1		3.330		64.5	35.7	103			
Surr: 2,4,6-Tribromophenol	2.3		3.330		69.1	35.2	108			
Surr: Nitrobenzene-d5	1.1		1.670		66.2	24	118			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.1	35.4	111			
Surr: 4-Terphenyl-d14	0.77		1.670		46.0	15	91.7			

Sample ID	1606819-001ams		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	WWTP-CC-5 (0-6")		Batch ID: 25938		RunNo: 35080					
Prep Date:	6/20/2016		Analysis Date: 6/22/2016		SeqNo: 1085290		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.659	0	76.8	39.3	86.4			D
4-Chloro-3-methylphenol	2.5	0.99	3.309	0	76.2	37.5	96.4			D
2-Chlorophenol	2.5	0.40	3.309	0	74.6	37.4	90.6			D
1,4-Dichlorobenzene	1.2	0.40	1.659	0	70.0	31.7	85			D
2,4-Dinitrotoluene	1.1	0.99	1.659	0	64.8	26.4	86			D
N-Nitrosodi-n-propylamine	1.2	0.40	1.659	0	70.6	43.5	83			D
4-Nitrophenol	2.4	0.50	3.309	0	72.1	32.7	98			D
Pentachlorophenol	2.3	0.79	3.309	0	69.5	26.6	87.4			D
Phenol	2.5	0.40	3.309	0	74.2	40.5	85.3			D
Pyrene	1.2	0.40	1.659	0	72.9	23.2	93.9			D
1,2,4-Trichlorobenzene	1.2	0.40	1.659	0	72.1	38.7	99			D
Surr: 2-Fluorophenol	2.3		3.309		68.5	28.3	102			D
Surr: Phenol-d5	2.5		3.309		75.9	35.7	103			D
Surr: 2,4,6-Tribromophenol	2.6		3.309		78.5	35.2	108			D
Surr: Nitrobenzene-d5	1.2		1.659		75.2	24	118			D
Surr: 2-Fluorobiphenyl	1.3		1.659		79.9	35.4	111			D

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	1606819-001ams		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	WWTP-CC-5 (0-6")		Batch ID: 25938		RunNo: 35080					
Prep Date:	6/20/2016		Analysis Date: 6/22/2016		SeqNo: 1085290		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	0.96		1.659		57.6	15	91.7			D

Sample ID	1606819-001amsd		SampType: MSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	WWTP-CC-5 (0-6")		Batch ID: 25938		RunNo: 35080					
Prep Date:	6/20/2016		Analysis Date: 6/22/2016		SeqNo: 1085291		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.668	0	77.8	39.3	86.4	1.84	30.2	D
4-Chloro-3-methylphenol	2.5	1.0	3.326	0	75.4	37.5	96.4	0.664	37.2	D
2-Chlorophenol	2.5	0.40	3.326	0	75.2	37.4	90.6	1.33	48	D
1,4-Dichlorobenzene	1.2	0.40	1.668	0	71.2	31.7	85	2.19	40.6	D
2,4-Dinitrotoluene	1.2	1.0	1.668	0	69.9	26.4	86	8.08	47.7	D
N-Nitrosodi-n-propylamine	1.2	0.40	1.668	0	71.5	43.5	83	1.73	52.5	D
4-Nitrophenol	2.4	0.50	3.326	0	73.5	32.7	98	2.42	36.6	D
Pentachlorophenol	2.3	0.80	3.326	0	69.7	26.6	87.4	0.728	65.5	D
Phenol	2.4	0.40	3.326	0	70.9	40.5	85.3	4.03	44	D
Pyrene	1.2	0.40	1.668	0	73.8	23.2	93.9	1.64	42.1	D
1,2,4-Trichlorobenzene	1.3	0.40	1.668	0	78.7	38.7	99	9.23	31.5	D
Surr: 2-Fluorophenol	2.2		3.326		64.8	28.3	102	0	0	D
Surr: Phenol-d5	2.3		3.326		70.2	35.7	103	0	0	D
Surr: 2,4,6-Tribromophenol	2.4		3.326		73.4	35.2	108	0	0	D
Surr: Nitrobenzene-d5	1.3		1.668		75.2	24	118	0	0	D
Surr: 2-Fluorobiphenyl	1.3		1.668		77.9	35.4	111	0	0	D
Surr: 4-Terphenyl-d14	0.95		1.668		56.8	15	91.7	0	0	D

Sample ID	mb-26005		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 26005		RunNo: 35322					
Prep Date:	6/22/2016		Analysis Date: 6/29/2016		SeqNo: 1092676		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	2.2		3.330		65.0	28.3	102			
Surr: Phenol-d5	2.2		3.330		65.6	35.7	103			
Surr: 2,4,6-Tribromophenol	3.1		3.330		94.6	35.2	108			
Surr: Nitrobenzene-d5	1.2		1.670		69.5	24	118			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.9	35.4	111			
Surr: 4-Terphenyl-d14	1.5		1.670		88.1	15	91.7			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	Ics-26005		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 26005		RunNo: 35322					
Prep Date:	6/22/2016		Analysis Date: 6/29/2016		SeqNo: 1092677		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	1.9		3.330		57.8	28.3	102			
Surr: Phenol-d5	2.0		3.330		59.3	35.7	103			
Surr: 2,4,6-Tribromophenol	2.5		3.330		76.1	35.2	108			
Surr: Nitrobenzene-d5	1.1		1.670		67.4	24	118			
Surr: 2-Fluorobiphenyl	1.1		1.670		67.2	35.4	111			
Surr: 4-Terphenyl-d14	1.2		1.670		70.3	15	91.7			

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#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	MB-26037		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 26037		RunNo: 35191					
Prep Date:	6/23/2016		Analysis Date: 6/24/2016		SeqNo: 1088910		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-26037		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 26037		RunNo: 35191					
Prep Date:	6/23/2016		Analysis Date: 6/24/2016		SeqNo: 1088911		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606819

26-Jul-16

Client: Western Refining Company

Project: WWTP Carbon Canister Confirmation Sampling

Sample ID	MB-26038	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 26038			RunNo: 35227					
Prep Date:	6/23/2016	Analysis Date: 6/27/2016			SeqNo: 1089173		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-26038		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 26038		RunNo: 35227					
Prep Date:	6/23/2016		Analysis Date: 6/27/2016		SeqNo: 1089174		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.7	80	120			
Arsenic	23	2.5	25.00	0	93.0	80	120			
Barium	23	0.10	25.00	0	93.0	80	120			
Beryllium	24	0.15	25.00	0	97.1	80	120			
Cadmium	24	0.10	25.00	0	95.4	80	120			
Chromium	23	0.30	25.00	0	92.8	80	120			
Cobalt	23	0.30	25.00	0	90.7	80	120			
Lead	22	0.25	25.00	0	89.1	80	120			
Nickel	23	0.50	25.00	0	91.4	80	120			
Selenium	24	2.5	25.00	0	95.8	80	120			
Silver	4.8	0.25	5.000	0	95.4	80	120			
Vanadium	24	2.5	25.00	0	97.5	80	120			
Zinc	23	2.5	25.00	0	91.3	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



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: 1606819

ReptNo: 1

Received by/date:

Logged By: Ashley Gallegos

6/15/2016 8:10:00 AM

Completed By: Ashley Gallegos

6/15/2016 1:02:13 PM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Client

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ?

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☐

No ☐

No VOA Vials ☒

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Not Present			

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: *WWTP CARBON CANISTER
CONFIRMATION SAMPLING*

Project #:

Project Manager:

ED RIEGE
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.2

Container Type and #	Preservative Type	HEAL No.
3 JARS	NEAT	160089
VIAL-2	SOBI	-005
VIAL-2	MEOH	

VIAL-2	MeOH	-001D
--------	------	-------

Received by:	Date	Time
<i>Jac. But</i>	<i>06/15/16</i>	<i>0810</i>
Received by:	Date	Time

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

[illegible]

Received by:	Date	Time
<i>Jac. Ant</i>	06/15/16	0810
Received by:	Date	Time

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

ATTACHMENT 1

Region 5 Waste Management Branch "Skinner List" Constituents of Concern for Wastes from Petroleum Processes

Inorganics

Antimony	Cadmium	Lead	Silver
Arsenic	Chromium	Mercury	Vanadium
Barium	Cobalt	Nickel	Zinc
Beryllium	Cyanide	Selenium	

Volatile Organics

Benzene	1,2-Dichloroethane	Ethylene dibromide (EDB)	1,1,1-Trichloroethane
Carbon disulfide	1,1-Dichloroethane	Methyl ethyl ketone (MEK)	Trichloroethene
Chlorobenzene	1,4-Dioxane	Styrene	Tetrachloroethylene
Chloroform	Ethylbenzene	Toluene	Xylenes (total)

Semivolatile Organics

Acenaphthene	o-Cresol	Diethyl phthalate	Naphthalene
Anthracene	m-Cresol	2,4 Dimethylphenol	4-Nitrophenol
Benzo(a)anthracene	p-Cresol	Dimethyl phthalate	Phenanthrene
Benzo(b)fluoranthene	Dibenz(a,h)anthracene	2,4 Dinitrophenol	Phenol
Benzo(k)fluoranthene	Di-n-butyl phthalate	Fluoranthene	Pyrene
Benzo(a)pyrene	1,2-Dichlorobenzene*	Fluorene	Pyridine
Bis(2-ethylhexyl) phthalate	1,3-Dichlorobenzene*	Indeno(1,2,3-cd)pyrene	Quinoline
Chrysene	1,4-Dichlorobenzene*	Methyl tertiary butyl ether (MTBE)	*- can be tested as a volatile

Low Concentration Polynuclear Aromatic Hydrocarbons (Optional)

Benzo(a)anthracene	Benzo(k)fluoranthene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene
Benzo(b)fluoranthene	Benzo(a)pyrene	Chrysene*	

* added to this group to assist the chromatographic resolution of chrysene from Dibenz(a,h)anthracene in sample extracts

Optional Semivolatile Organics

~~Indene~~ no ~~Benzenethiol**~~ no ~~Dibenz(a,h)acridine~~ no 1-Methylnaphthalene*

*Note that 2-Methylnaphthalene is part of Appendix IX and is a CLP TCL organic. 1-Methylnaphthalene is not on these lists.

**Benzenethiol can be detected in certain petroleum refinery wastes. Its measurement must compensate for its instability at neutral and acid pH values during sample preparation and its unstable instrument calibration standards

RESPONSE ACTION REPORT

Wastewater Treatment Plant
Carbon Canister – Rupture Disk
December 27, 2015 Release
January 7, 2016 Release



Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico
EPA ID# NMD000333211

AUGUST 2016



DiSorbo
Environmental Consulting Firm



Tracy Payne
Senior Geologist

8501 North Mopac Expy
512.693.4190 (P)

Suite 300
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Austin, TX 78759
www.disorboconsult.com

Response Action Report Checklist – WWTP Carbon Canister Release

Included	NA	
☒	☐	Title Page
☒	☐	Executive Summary
☒	☐	Report Checklist
☒	☐	Table of Contents
☒	☐	Section 1 - Introduction
☒	☐	General information about Gallup Refinery and Area of Release
☒	☐	Description of the Release
☒	☐	Characterization of Released Material
☒	☐	o Discussion of the Unit / Process / Area of Release (as applicable)
☒	☐	o Location of unit(s) on a topographic map of appropriate scale
☒	☐	o Designation of type and function of unit(s)
☒	☐	o General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings)
☒	☐	o Dates that the unit(s) was operated;
☐	☒	o Specifications of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous waste or hazardous constituents in the wastes
☒	☐	o All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include ground water data, soil analyses, air, and surface water data).
☒	☐	Site Conditions That Affected Release
☒	☐	Section 2 - Remediation Activities
☒	☐	Detailed discussion of remediation, what type of cleanup conducted, where was it conducted (GPS coordinates or measurements to physical site features), dimensions of excavation, volumes of remediation waste, characterization sampling, disposition of wastes
☒	☐	Soil Sampling – detailed discussion of sample collection and analysis
☐	☒	Soil Field Screening
☒	☐	Subsurface soil sampling – detailed discussion on soil borings, sampling and analysis
☐	☒	Groundwater Conditions – detailed discussion well installation and groundwater sample collection and analysis
☒	☐	Section 3 – Regulatory Criteria Comparisons
☒	☐	Presentation of applicable regulatory screening criteria and comparison to site concentrations.
☒	☐	Section 4 – Conclusions and Recommendations - NMED Concurrence – No Further Action Required - Deferral – Release Area within Existing SWMU / AOC - Possible consideration for SWMU Assessment Report
☒	☐	Tables – Soil and/or Groundwater Data
☒	☐	Figures ☒ Figure – Affected Area - Topo Map ☒ Figure - Area Affected by Release – Aerial Photo ☒ Figure - Aerial Photo – Tank – Unit – Process Area ☒ Figure - Extent of Excavation Activities

		☒ Figure - Sampling Locations (Soil, Wells, Surface Water)
☒	☐	Appendices
☒	☐	• Appendix – Analytical
☒	☐	• Appendix – Photos
☒	☐	• Appendix – Waste Manifests
☒	☐	• Appendix – Calculations for Reportable Quantities
☒	☐	• Appendix – Form C-141 Release Notification and Corrective Action
☒	☐	• Appendix – Boring Logs/Monitoring Well Completion Logs
☒	☐	• Appendix – Standard Operating Procedures
☒	☐	• Appendix – Field Methods / Sampling Procedures

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Appendix A-2 Western Refining – Gallup Refinery January 8, 2016 Interoffice Memorandum Initial Calculation of Volume Released January 7, 2016 Release
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Appendix B Form C-141 Release Notification and Corrective Action
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Appendix C Analytical Data – Released Material

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Appendix C-2 Western Refining – Gallup Refinery January 8, 2016 Interoffice Memorandum Transmittal of WWTP Analytical Results November 12, 2015

Appendix D Western Refining – Gallup Refinery Standard Operating Procedures Backwashing the Carbon Canister to Reduce Pressure on the Vessel

Appendix E Waste Manifest

Appendix F Photographs

Appendix G Field Methods

Appendix H Soil Sampling Logs

Appendix I Analytical Data – Confirmation Samples

Appendix I-1 Hall Environmental Analysis Laboratory, Inc. January 20, 2016 Analytical Report No. 1601570

Appendix I-2 Hall Environmental Analysis Laboratory, Inc. April 25, 2016 Analytical Report No. 1604730

Appendix I-3 Hall Environmental Analysis Laboratory, Inc. July 26, 2016 Analytical Report No. 1606819

Executive Summary

The Gallup Refinery is located 17 miles east of Gallup, New Mexico. This Response Action Report provides the details and data for two separate releases that occurred at the Wastewater Treatment Plant in December 2015 and January 2016.

Soil was excavated from the spill area. Soil confirmation samples were collected and analyzed for volatile organics, motor range, gasoline range and diesel range organics (EPA Method 8015), semivolatile organics and metals.

The soil confirmation samples collected from the spill area were reported to contain low concentrations that exceed the screening levels. The following constituents exceeded the screening levels:

- Arsenic;
- Benzene;
- 1,2,4-Trimethylbenzene;
- Ethylbenzene; and
- Total Xylenes.

Section 1

Introduction

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery property covers approximately 810 acres. Figure 1 presents the location of the wastewater treatment plant on the northwestern portion of the refinery property. An aerial photograph of the wastewater treatment plant is provided as Figure 2.

1.1 General Information

The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck. Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, sulfur recovery, mercox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

1.2 Discussion of the Releases

1.2.1 December 27, 2015 Release

At 16:00 on December 27, 2015, wastewater operators were back washing the south carbon canister when wastewater was released from the rupture disk. A blocked valve downstream of the canister created pressure greater than 75 PSI causing the rupture disk to rupture. The release had a duration of 35 minutes. It is estimated, with an average flow of 190.3 gallons per minute, that approximately 6,660.5 gallons (158.5 barrels) of wastewater were released. A copy of Western's calculations are included in Appendix A. The wastewater filled the earthen dike containment and subsequently overflowed allowing the wastewater to travel downhill toward Pond EP-1. The overflow did not reach Pond EP-1. The WWTP operators immediately upon discovery changed the flow from the south carbon canister to the north carbon canister. The area affected by the release is depicted on Figure 3.

Notification of the spill was provided to the NMED Hazardous Waste Bureau and the Oil Conservation Division on December 27, 2015 at 20:16. An initial written report (Form C-141) was completed on

January 8, 2016, for this release and is provided in Appendix B. A copy of the final Form C-141, which was completed on August 24, 2016, is also provided in Appendix B.

1.2.2 January 7, 2016 Release

At 23:00 on January 7, 2016, wastewater operators were back washing the south carbon canister when wastewater was released from the rupture disk. A blocked valve downstream of the canister created pressure greater than 75 PSI causing the rupture disk to rupture. The release had a duration of 20 minutes. It is estimated, with an average flow of 96.6 gallons per minute, that approximately 1,932 gallons (46 barrels) of wastewater was released. A copy of Western's calculations are included in Appendix A. The wastewater filled the earthen dike containment and subsequently overflowed allowing the wastewater to travel downhill toward Pond EP-1. The overflow did not reach Pond EP-1. The WWTP operators, immediately upon discovery, changed the flow from the south carbon canister to the north carbon canister. The area affected by the release is depicted on Figure 3.

Notification of the spill was provided to the Oil Conservation Division and the NMED Hazardous Waste Bureau on January 8, 2016 at 15:36 and 15:39, respectively. An initial written report (Form C-141) was completed on January 22, 2016, for this release and is provided in Appendix B. The final C-141 Form was completed on August 24, 2016 and is provided in Appendix B.

1.3 Characterization of the Release Material

1.3.1 December 27, 2015 Release

A sample of the spilled liquid was collected and submitted to Western's onsite laboratory. The analytical result showed that the wastewater had a benzene concentration of 0.45 mg/l. This concentration is less than the 0.5 mg/l RCRA Regulatory Limit. A copy of the documentation for the determination of the benzene concentration is included in Appendix C.

1.3.2 January 7, 2016 Release

A sample of the spilled liquid was collected and submitted to Western's onsite laboratory. The analytical result showed that the wastewater had a benzene concentration exceeding the 0.5 mg/l RCRA Regulatory Limit.

An analysis of the wastewater from the WWTP on November 12, 2015 reported the following concentrations:

-
-
- Benzene – 3.75365 mg/l;
 - Toluene – 2.40118 mg/l;
 - Ethylbenzene – 0.741223 mg/l;
 - M,P Xylene – 1.09132 mg/l; and
 - O-Xylene – 1.09254 mg/l.

A copy of the documentation for the determination of the above listed constituents and concentrations is included in Appendix C.

1.4 Discussion of the Process Area

Western operates a Wastewater Treatment Plant (WWTP), which went on line of May 2012. The wastewater treatment system is a network of curbing, paving, catch basins, and underground piping used to collect wastewater from various processing areas within the refinery. The wastewater effluent then flows into the equalization tanks and the NAPIS where the oil is separated from water. The skimmed slop oil is passed to a collection chamber where it is pumped back into the refinery process. The clarified water is routed to the new WWTP where benzene is removed and the treated water flows into the new pond STP-1. STP-1 consists of two bays, north and south and each bay is equipped with five aerators per bay. Effluent from STP-1 then flows into Evaporation Pond 2 and gravitates to the rest of the ponds.

During episodes of unit upsets or major storm events, the wastewater is held in one of the three equalization tanks, T-35, T-27 and T-28, which are used to handle large process and storm water flows allowing the flow to the NAPIS to be controlled. These tanks are also used to store wastewater if problems occur with the downstream equipment, i.e., NAPIS and the WWTP.

As seen on Figure 2 the WWTP is located in the northwest corner of the Gallup Refinery. The carbon canisters are located west of the WWTP building. Rupture disks are located at the inlet of the north and south canisters. The disks are set to rupture when the pressure reaches 75 PSI. A small earthen-diked containment structure is located west of the carbon canisters. West of the containment structure, the surface slopes downward to the west. This lower level is the same grade as the API separator and Ponds EP-1 and EP-2.

The carbon canisters are backwashed to remove deposits from the top of the carbon bed that can harden and impede the effluent flow through the carbon bed. The backwashing is used to fluff the bed to remove air from the carbon bed. This process is recommended by the manufacturer and

occurs before the canisters are put on line, and when there is a high pressure differential across the bed (35 PSI). A copy of the Standard Operating Procedure - Backwashing the Carbon Canister to Reduce Pressure on the Vessel has been provided in Appendix D. The wastewater that enters the canisters has been treated.

1.5 Site Conditions That Affect the Release

Local site topographic features include high ground in the southeast gradually decreasing to lowland fluvial plain in the northwest. Elevations on the refinery property range from 7,040 feet to 6,860 feet. The area of the site near the WWTP is at an approximate elevation of 6,910 feet above mean sea level (msl). Photographs are included in this report and show the land surface in the immediate area.

The release occurred on the upper level immediately adjacent to the carbon canisters. The release then travelled down the slope to the lower level.

Section 2

Remediation Activities

2.1 Initial Remediation

2.1.1 December 27, 2015 Release

Western's Maintenance Department and contract personnel were called out to vacuum the spilled wastewater. The volume recovered is undetermined. A sample of the liquid was collected and submitted to Western's onsite laboratory for benzene analysis.

2.1.2 January 7, 2016 Release

Since the incident occurred at night and the area was covered with snow, assessment of the extent of the contamination was not completed until the next morning on January 8, 2016. A vacuum truck was used to remove the treated wastewater from the affected area at the WWTP around the carbon canister containment area and the sloping downhill area. The vacuum truck removed about 27 bbls from the containment area and an additional 5 to 7 bbls from the area downhill of the carbon canisters. A sample of the liquid was collected and submitted to Western's onsite laboratory for benzene analysis.

On January 11, 2016 approximately 2 to 3 inches of soil was removed from the area north of the containment structure and the lower level. Soil was not excavated on the slope between the carbon canisters and the lower level due to a safety hazard created by the presence of snow and ice. An estimated volume of 4 cubic yards of soil was excavated and placed in a roll off box. The contaminated soil was shipped to Gandy Marley, Inc. in Chavez County, New Mexico. A copy of the waste manifest is included in Appendix E. Figure 4 depicts the extent of the soil excavation. Photos of the spill area and areas of excavation are included in Appendix F.

2.2 Assessment – Soil Confirmation Sampling Event No. 1

2.2.1 Soil Sampling

On January 13, 2016, three soil samples were collected from three separate locations:

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1. Carbon Canister - Sample #1 was collected north of the containment structure for the WWTP Carbon Canisters. The soil sample was collected from the surface to a depth of 4 inches below ground level.
 2. Carbon Canister - Sample #2 was collected on the slope between the containment pit and the base of the slope. The soil sample was collected from the surface to a depth of 4 inches below ground level.
 3. Carbon Canister - Sample #3 was collected at the base of the slope immediately adjacent to an aboveground pipeline. The soil sample was collected from the surface a depth of 4 inches below ground level.

Figure 4 depicts the locations of Carbon Canister - Soil Samples #1, #2 and #3 and are represented on the figure as locations CC-1, CC-2 and CC-3, respectively.

2.2.2 Soil Screening Results

Field screening was not conducted during the collection of soil samples.

2.2.3 Soil Sampling Analytical Results

On January 15, 2016 Carbon Canister - Soil Samples #1, #2 and #3 were delivered to Hall Environmental Analysis Laboratory, Inc. (HEAL). Each soil sample was analyzed for the following:

- Diesel Range Organics – EPA Method 8015M/D;
- Gasoline Range Organics – EPA Method 8015D; and
- Volatile Organics – EPA Method 8021B.

On January 20, 2016 HEAL issued Analytical Report No. 1601570. A copy of the report is provided in Appendix I. Table 1 provides a summary of the analytical results.

2.3 Assessment – Soil Confirmation Sampling Event No. 2

2.3.1 Soil Sampling

On April 7, 2016, one soil sample (Carbon Canister Overflow) was collected from the slope situated between the carbon canisters and the lower level. The soil sample was collected from the surface to a depth of 4 inches below ground level.

Figure 4 depicts the location of the soil sample as sample location CC-4.

2.3.2 Soil Screening Results

Field screening was not conducted during the collection of the soil sample.

2.3.3 Soil Sampling Analytical Results

On April 7, 2016 the sample “Carbon Canister Overflow” was delivered to HEAL. The soil sample was analyzed for the following:

- Diesel Range Organics – EPA Method 8015M/D;
- Motor Oil Range Organics – EPA Method 8015D;
- Gasoline Range Organics – EPA Method 8015D;
- Volatile Organics – EPA Method 8260B;
- Semi-Volatile Organics – EPA Method 8270D;
- Metals – EPA Method 6010B;
- Mercury – EPA Method 7471; and
- Cyanide – EPA Method 335.4.

On April 25, 2016 HEAL issued Analytical Report No. 1604730. A copy of the report is provided in Appendix I. Table 2 provides a summary of the analytical results.

2.4 Assessment – Soil Confirmation Sampling Event No. 3

2.4.1 Soil Sampling

On June 14, 2016, five soil samples were collected from five separate locations on the lower level of the excavation.

1. WWTP-CC-5 was collected approximately 54 feet north of the process unit and 13.5 feet west of the pipe rack. The soil sample was collected from the surface to a depth of 6 inches below ground level using a decontaminated hand auger.
2. WWTP-CC-6 was collected approximately 31 feet north of the process unit and 32 feet west of the pipe rack. The soil sample was collected from the surface to a depth of 6 inches below ground level using a decontaminated hand auger.
3. WWTP-CC-7 was collected approximately 46 east of the drain and 60 feet west of the pipe rack. The soil sample was collected from the surface a depth of 6 inches below ground level using a decontaminated hand auger.

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4. WWTP-CC-8 was collected approximately 31 feet northeast of the drain. The soil sample was collected from the surface a depth of 6 inches below ground level using a decontaminated hand auger.
 5. WWTP-CC-9 was collected approximately 59 feet northeast of the drain and 55 feet west of the pipe rack. The soil sample was collected from the surface a depth of 6 inches below ground level using a decontaminated hand auger.

Figure 4 depicts the locations of the soil samples. The soil samples WWTP-CC-5 thru WWTP-CC-9 are represented on the figure as locations CC-5 thru CC-9. A copy of the field methods used to collect the soil samples is included as Appendix G. Copies of the soil sampling logs are included in Appendix H.

2.4.2 Soil Screening Results

Field screening was not conducted during the collection of the soil sample.

2.4.3 Soil Sampling Analytical Results

On June 15, 2016 soil samples WWTP-CC-5 thru WWTP-CC-9 were delivered to HEAL. Each soil sample was analyzed for the following:

- Diesel Range Organics – EPA Method 8015M/D;
- Motor Oil Range Organics – EPA Method 8015D;
- Gasoline Range Organics – EPA Method 8015D;
- Volatile Organics – EPA Method 8260B;
- Semi-Volatile Organics – EPA Method 8270D; and
- Skinner List Metals – EPA Method 6010B.

On July 26, 2016 HEAL issued Analytical Report No. 1606819. A copy of the report is provided in Appendix I. Table 3 provides a summary of the analytical results.

2.5 Subsurface Soil Conditions

No soil borings or monitor wells were installed during the investigation.

2.6 Groundwater Conditions

A groundwater investigation was not conducted.

2.7 Surface Water Conditions

The releases did not reach surface water.

2.8 Surface Air and Subsurface Vapor Conditions

A vapor release was not associated these releases.

Section 3

Regulatory Criteria Comparisons

The potential cleanup levels (i.e., screening levels) are specified in NMED's *Risk Assessment Guidance for Site Investigations and Remediation* dated July 2015 and in the Environmental Protection Agency's (EPA) Regional Screening Levels dated June 2015 if NMED values are not available.

For non-residential properties (e.g., the Gallup Refinery), the soil screening levels (SSLs) must be protective of commercial/industrial workers throughout the upper one foot of surface soils and construction workers throughout the upper ten feet based on NMED criteria. NMED residential soil screening levels are applied to the upper ten feet and soil screening levels for protection of groundwater apply throughout the vadose zone. EPA soil screening levels for direct contact exposure apply to the upper two feet of the vadose zone.

The cleanup criteria are shown in Tables 1 through 3.

3.1 Soil Confirmation Sampling Event No. 1

On January 13, 2016, three soil samples were collected from three separate locations. Table 1 provides a summary of the analytical results. A review of the analytical results for volatile organics reported the benzene concentration (0.38 mg/kg) detected in CCSS#1 exceeded the Risk Based SSL for a Dilution Attenuation Factor (DAF) of 20 (0.038 mg/kg). The Diesel Range Organics were reported above the detection limit for CCSS#2 (13 mg/kg). This concentration is well below the Residential Exposure of 1000 mg/kg. The Gasoline Range Organics were reported above the detection limit for CCSS#1 (13 mg/kg).

3.2 Soil Confirmation Sampling Event No. 2

On April 7, 2016, one soil sample was collected from one location. Table 2 provides a summary of the analytical results. A review of the analytical results for metals reported that the arsenic concentration (1.6 mg/kg) detected in Carbon Canister Overflow exceeded the Risk Based SSL for a DAF of 20 (0.299 mg/kg).

3.3 Soil Confirmation Sampling Event No. 3

On June 14, 2016, five soil samples were collected from five separate locations on the lower level of the excavation. Table 3 provides a summary of the analytical results. A review of the analytical results for metals reported that the arsenic concentration (1.6 mg/kg) detected in WWTP-CC-5 exceeded the Risk Based SSL for a DAF of 20.

A review of the analytical results for volatile organics reported the following:

- 1,2,4-Trimethylbenzene concentrations (0.986J mg/kg – 2.87 mg/kg) detected in all five samples exceeded the Risk Based SSL for a DAF of 20 (0.42 mg/kg);
- Ethylbenzene concentrations (0.535J mg/kg – 1.25 mg/kg) detected in all five samples exceeded the Risk Based SSL for a DAF of 20 (0.262 mg/kg); and
- Total Xylenes concentrations detected in WWTP-CC-5, WWTP-CC-7, WWTP-CC-8 and WWTP-CC-9 (3.39 mg/kg – 4.65 mg/kg) exceeded the Risk Based SSL for a DAF of 20 2.98 mg/kg).

Section 4

Conclusions and Recommendations

On December 27, 2015 and January 7, 2016 wastewater operators were back washing the south carbon canister when wastewater was released from the rupture disk. These releases occurred in two areas.

4.1 Upper Level and Slope

The release occurred in the upper level immediately adjacent to the carbon canisters and travelled down the slope to the lower level. Neither the upper level nor the slope is part of an existing AOC or SWMU. The upper level around the containment was excavated and one soil sample was collected north of the containment. The analytical results for volatile organics reported the benzene concentration detected in Carbon Canister Soil Sample #1 exceeded the Risk Based SSL for a DAF of 20.

The slope was not immediately excavated. Carbon Canister Soil Sample #2 was collected along the slope within the extent of the spill. Carbon Canister Soil Sample #3 was collected at the base of slope within the extent of the spill. The analytical results for volatile organics were reported below detection limits for both samples.

After the slope was excavated an additional sample was collected. Carbon Canister Overflow sample (CC-4 on Figure 4) indicated the arsenic concentration exceeded the Risk Based SSL for a DAF of 20. The analytical results for volatile organics were reported below detection limits for the sample.

4.2 Lower Level

The release travelled down the slope to this lower level. This area is part of SWMU 15. The area on this lower level was excavated. On June 14, 2016, five soil samples (CC-5 thru CC-9 on Figure 4) were collected from five separate locations on the lower level of the excavation. A review of the analytical results for metals reported that the arsenic concentration detected in WWTP-CC-5 exceeded the Risk Based SSL for a DAF of 20.

A review of the analytical results for volatile organics reported the following:

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- 1,2,4-Trimethylbenzene concentrations detected in all five samples exceeded the Risk Based SSL for a DAF of 20;
 - Ethylbenzene concentrations detected in all five samples exceeded the Risk Based SSL for a DAF of 20; and
 - Total Xylenes concentrations detected in WWTP-CC-5, WWTP-CC-7, WWTP-CC-8 and WWTP-CC-9 exceeded the Risk Based SSL for a DAF of 20.

4.3 Recommended Additional Excavation and Assessment

The reported concentrations for arsenic did exceed screening levels, but are very low at only 1.6 mg/kg and are most likely reflective of naturally occurring concentrations. Benzene was the only organic constituent to exceed the DAF 20 screening level in only one soil sample at a low concentration of 0.38 mg/kg. This single exceedance on the upper level is unlikely to pose a threat to groundwater resources and due to the high potential for any remaining benzene to rapidly degrade, no further action is recommended for this area.

On the lower level, three organic constituents were found to exceed the DAF 20 screening level, but all are less than one order of magnitude above the screening levels. These three constituents (1,2,4-trimethylbenzene, ethylbenzene, and total xylenes) are readily degradable under natural conditions and should not pose to usable groundwater resources. In addition, this same area will likely be investigated in the future when SWMU 15 is addressed. No further action is recommended at this time.

Tables

Table 1 Soil Analytical Results – January 13, 2016

Table 2 Soil Analytical Results – April 7, 2016

Table 3 Soil Analytical Results – June 14, 2016

Table 1
Soil Analytical Results - January 13, 2016
WWTP Carbon Canister
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	Carbon Canister- Soil Sample #1	Carbon Canister- Soil Sample #2	Carbon Canister- Soil Sample #3
Hall Environmental Lab ID							1601570-001	1601570-002	1601570-003
Sample Date							1/13/2016	1/13/2016	1/13/2016
Volatile Organics - mg/kg									
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	0.38	<0.046	<0.048
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	0.59	<0.046	<0.048
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	0.10	<0.046	<0.048
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	0.46	<0.093	<0.096
EPA Method 8015D - mg/kg									
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<9.3	13	<9.7
Motor Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<47	<48	<48
Gasoline Range Organics (GRO)	-	-	-	-	-	-	13	<4.6	<4.8

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013

RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013

RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

(11) NMED Table 6-2 TPH Soil Screening Levels "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Table 2
Soil Analytical Results - April 7, 2016
WWTP Carbon Canister
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non-Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	Carbon Canister Overflow
Hall Environmental Lab ID							1604730-001
Sample Date							4/7/2016
EPA Method 8015D - mg/kg							
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<3.4
Gasoline Range Organics (GRO)	-	-	-	-	-	-	<0.68
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<47
EPA Method 7470 mg/kg							
Mercury	2.38E+01	(1)	2.07E+01	(5)	6.54E-01	(8)	0.0067
EPA Method 335.4 - mg/kg							
Cyanide	1.12E+01	(1)	1.21E+01	(5)	5.22E-03	(8)	<0.282
EPA Method 6010B Soil Metals - mg/kg							
Antimony	3.13E+01	(1)	1.42E+02	(5)	6.56E+00	(8)	2.2
Arsenic	4.25E+00	(1)	2.15E+01	(4)	2.99E-01	(8)	1.6
Barium	1.56E+04	(1)	4.35E+03	(5)	2.70E+03	(8)	360
Beryllium	1.56E+02	(1)	1.48E+02	(5)	1.96E+02	(8)	0.77
Cadmium	7.05E+01	(1)	7.21E+01	(5)	9.39E+00	(8)	<0.063
Chromium	9.66E+01	(1)	1.34E+02	(5)	2.01E+05	(8)	6.8
Cobalt	2.30E+01	(2)	3.50E+02	(6)	5.40E+00	(9)	3.7
Lead	4.00E+02	(1)	8.00E+02	(4)	2.80E+02	(10)	4.2
Nickel	1.56E+03	(1)	6.19E+03	(5)	4.85E+02	(8)	6.8
Selenium	3.91E+02	(1)	1.75E+03	(5)	1.02E-01	(8)	<1.1
Silver	3.91E+02	(1)	1.77E+03	(5)	1.38E+01	(8)	<0.032
Vanadium	3.94E+02	(1)	6.14E+02	(5)	1.26E+03	(8)	14
Zinc	2.35E+04	(1)	1.06E+05	(5)	7.41E+03	(8)	13
EPA Method 8260B - mg/kg							
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02	(9)	<0.0032
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E+01	(8)	<0.0020
1,1,1,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03	(8)	<0.0054
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03	(8)	<0.0039
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01	(8)	<0.0018
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.011
1,1-Dichloropropene	-	-	-	-	-	-	<0.0026
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.0050
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<0.0057
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.0035
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	<0.0024
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.010
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<0.0024
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.0029
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<0.0086
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<0.0028
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	<0.0024
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.0027
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<0.0038
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.0041
1,4-Dioxane	5.30E+01	(3)	2.40E+02	(7)	9.40E-04	(9)	<0.16
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.0074
2,2-Dichloropropane	-	-	-	-	-	-	<0.0019
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	<0.019
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.0024

Table 2
Soil Analytical Results - April 7, 2016
WWTP Carbon Canister
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	Carbon Canister Overflow
Hall Environmental Lab ID							1604730-001
Sample Date							4/7/2016
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.018
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.0071
4-Chlorotoluene	-	-	-	-	-	-	<0.0029
4-Isopropyltoluene	-	-	-	-	-	-	<0.0030
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.0097
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	<0.043
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<0.013
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.0027
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<0.0019
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<0.0040
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	<0.012
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.011
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<0.0022
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.0027
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.0066
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<0.0025
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.0029
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<0.0019
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.0031
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<0.0030
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<0.0029
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.010
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	<0.0027
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.0041
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	<0.0028
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.010
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	0.0097
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.0052
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	<0.0029
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	<0.0026
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	<0.0046
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.0030
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.0027
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.0027
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	<0.0020
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.0093
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.0048
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<0.0036
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.0025
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.0027
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	<0.0063
EPA Method 8270B - mg/kg							
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.05
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.05
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.05
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.05
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<0.05
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<0.05

Table 2
Soil Analytical Results - April 7, 2016
WWTP Carbon Canister
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	Carbon Canister Overflow
Hall Environmental Lab ID							1604730-001
Sample Date							4/7/2016
2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<0.05
3+4-Methylphenol	-	-	-	-	-	-	<0.05
4-Nitrophenol	-	-	-	-	-	-	<0.05
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<0.05
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<0.05
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<0.05
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<0.05
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<0.05
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<0.05
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	<0.05
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<0.05
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<0.05
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	<0.05
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<0.05
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	<0.05
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<0.05
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	<0.05
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<0.05
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.05
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	<0.05
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	0.05
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<0.05
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<0.05
Quinoline	1.80E-01	(3)	7.70E-01	(7)	7.80E-04	(9)	<0.05

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

(11) NMED Table 6-2 TPH Soil Screening Levels "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Table 3
Soil Analytical Results - June 14, 2016
WWTP Carbon Canister Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	WWTP-CC-5 (0-6")	WWTP-CC-6 (0-6")	WWTP-CC-7 (0-6")	WWTP-CC-8 (0-6")	WWTP-CC-9 (0-6")
Hall Environmental Analytical Lab ID							1606819-001	1606819-002	1606819-003	1606819-004	1606819-005
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
EPA Method 8015D - mg/kg											
Diesel Range Organics (DRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<1.8	16	<1.8	12	6.9 J
Gasoline Range Organics (GRO)	-	-	-	-	-	-	<0.67	<0.68	<0.77	2.8 J	<0.81
Motor Oil Range Organics (MRO)	1.00E+03	(11)	3.80E+03	(11)	-	-	<48	<49	<48	<50	<47
EPA Method 7470 mg/kg											
Mercury	2.38E+01	(1)	2.07E+01	(5)	6.54E-01	(8)	0.011	0.031 J	0.031 J	0.065	0.028 J
EPA Method 6010B Soil Metals - mg/kg											
Antimony	3.13E+01	(1)	1.42E+02	(5)	6.56E+00	(8)	<1.2	<1.2	<1.2	<1.2	<1.2
Arsenic	4.25E+00	(1)	2.15E+01	(4)	2.99E-01	(8)	1.6	<3.6	<3.6	<7.2	<3.7
Barium	1.56E+04	(1)	4.35E+03	(5)	2.70E+03	(8)	540	460	470	1400	760
Beryllium	1.56E+02	(1)	1.48E+02	(5)	1.96E+02	(8)	0.49	0.41	0.27	0.37	0.36
Cadmium	7.05E+01	(1)	7.21E+01	(5)	9.39E+00	(8)	<0.063	<0.063	<0.063	<0.063	<0.064
Chromium	9.66E+01	(1)	1.34E+02	(5)	2.01E+05	(8)	4.8	3.9	2.7	4.8	3.6
Cobalt	2.30E+01	(2)	3.50E+02	(6)	5.40E+00	(9)	2.4	2.3	1.6	2.2	2.0
Lead	4.00E+02	(1)	8.00E+02	(4)	2.80E+02	(10)	3.3	0.31	<0.17	0.82	0.24 J
Nickel	1.56E+03	(1)	6.19E+03	(5)	4.85E+02	(8)	4.1	4.2	2.5	3.7	3.4
Selenium	3.91E+02	(1)	1.75E+03	(5)	1.02E-01	(8)	<1.1	<2.2	<2.2	<2.2	<2.2
Silver	3.91E+02	(1)	1.77E+03	(5)	1.38E+01	(8)	<0.032	<0.032	<0.031	<0.031	<0.032
Vanadium	3.94E+02	(1)	6.14E+02	(5)	1.26E+03	(8)	13	9.7	9.2	11	12
Zinc	2.35E+04	(1)	1.06E+05	(5)	7.41E+03	(8)	10	13	5.6	9.4	9.2
EPA Method 335.4 - mg/kg											
Cyanide	1.12E+01	(1)	1.21E+01	(5)	5.22E-03	(8)	<0.256	<0.259	<0.239	<0.233	<0.253
EPA Method 8260B - mg/kg											
1,1,1,2-Tetrachloroethane	2.81E+01	(1)	1.37E+02	(4)	3.59E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,1,1-Trichloroethane	1.44E+04	(1)	1.36E+04	(5)	5.11E+01	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,1,2,2-Tetrachloroethane	7.98E+00	(1)	3.94E+01	(4)	4.80E-03	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,1,2-Trichloroethane	2.61E+00	(1)	2.30E+00	(5)	2.23E-03	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,1-Dichloroethane	7.86E+01	(1)	3.83E+02	(4)	1.36E-01	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,1-Dichloroethene	4.40E+02	(1)	4.24E+02	(5)	1.95E+00	(8)	<0.266	<0.250	<0.347	<0.280	<0.271
1,1-Dichloropropene	-	-	-	-	-	-	<1.62	<1.53	<2.12	<1.71	<1.66
1,2,3-Trichlorobenzene	6.30E+01	(2)	9.30E+02	(6)	4.20E-01	(9)	<0.393	<0.370	<0.513	<0.414	<0.401
1,2,3-Trichloropropane	5.10E-02	(1)	1.21E+00	(4)	5.21E-05	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.492	<0.464	<0.643	<0.519	<0.502
1,2,4-Trimethylbenzene	5.80E+01	(2)	2.40E+02	(6)	4.20E-01	(9)	2.17	0.986 J	2.87	2.75	2.08
1,2-Dibromo-3-chloropropane	8.58E-02	(1)	1.18E+00	(4)	2.34E-05	(8)	<0.173	<0.163	<0.226	<0.182	<0.176
1,2-Dibromoethane (EDB)	6.72E-01	(1)	3.31E+00	(4)	3.52E-04	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.236	<0.223	<0.309	<0.249	<0.241
1,2-Dichloroethane (EDC)	8.32E+00	(1)	4.07E+01	(4)	8.14E-03	(8)	<1.62	<1.53	<2.12	<1.71	<1.66

Table 3
Soil Analytical Results - June 14, 2016
WWTP Carbon Canister Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	WWTP-CC-5 (0-6")	WWTP-CC-6 (0-6")	WWTP-CC-7 (0-6")	WWTP-CC-8 (0-6")	WWTP-CC-9 (0-6")
Hall Environmental Analytical Lab ID							1606819-001	1606819-002	1606819-003	1606819-004	1606819-005
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
1,2-Dichloropropane	1.78E+01	(1)	2.54E+01	(5)	2.43E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.20E+04	(6)	3.40E+00	(9)	0.746 J	0.321 J	0.944 J	0.967 J	0.654
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.300	<0.282	<0.392	<0.316	<0.306
1,3-Dichloropropane	1.60E+03	(2)	2.30E+04	(6)	2.60E+00	(9)	<1.62	<1.53	<2.12	<1.71	<1.66
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.304	<0.286	<0.397	<0.320	<0.310
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.184	<0.174	<0.241	<0.195	<0.188
2,2-Dichloropropane	-	-	-	-	-	-	<0.205	<0.193	<0.268	<0.216	<0.209
2-Butanone	3.74E+04	(1)	9.17E+04	(5)	2.01E+01	(8)	<0.585	<0.551	<0.765	<0.617	<0.597
2-Chlorotoluene	1.56E+03	(1)	7.08E+03	(5)	3.56E+00	(8)	<0.276	<0.260	<0.361	<0.291	<0.282
2-Hexanone	2.00E+02	(2)	1.30E+03	(6)	1.76E-01	(9)	<0.404	<0.381	<0.528	<0.426	<0.412
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.427	<0.402	<0.558	<0.450	<0.436
4-Chlorotoluene	-	-	-	-	-	-	<0.270	<0.254	<0.353	<0.284	<0.275
4-Isopropyltoluene	-	-	-	-	-	-	<0.304	<0.287	<0.398	<0.321	<0.311
4-Methyl-2-pentanone	5.81E+03	(1)	2.02E+04	(5)	4.80E+00	(8)	<0.325	<3.06	<4.24	<3.42	<3.31
Acetone	6.63E+04	(1)	2.42E+05	(5)	4.98E+01	(8)	12.9	8.32	5.77 J	9.91	5.31 J
Benzene	1.78E+01	(1)	8.72E+01	(4)	3.80E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Bromobenzene	2.90E+02	(2)	1.80E+03	(6)	8.40E-01	(9)	<0.165	<0.155	<0.216	<0.174	<0.168
Bromodichloromethane	6.19E+00	(1)	3.02E+01	(4)	6.21E-03	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Bromoform	6.74E+02	(1)	3.25E+03	(4)	4.11E-01	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Bromomethane	1.77E+01	(1)	1.79E+01	(5)	3.43E-02	(8)	<0.292	<0.275	<0.382	<0.308	<0.298
Carbon disulfide	1.55E+03	(1)	1.62E+03	(5)	4.42E+00	(8)	<0.600	<0.565	<0.785	<0.633	<0.612
Carbon tetrachloride	1.07E+01	(1)	5.25E+01	(4)	3.33E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Chlorobenzene	3.78E+02	(1)	4.12E+02	(5)	8.36E-01	(8)	<0.186	<0.175	<0.243	<0.196	<0.190
Chloroethane	1.90E+04	(1)	1.66E+04	(5)	1.07E+02	(8)	<0.299	<0.282	<0.392	<0.316	<0.306
Chloroform	5.90E+00	(1)	2.87E+01	(4)	1.09E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Chloromethane	4.11E+01	(1)	2.01E+02	(4)	9.51E-02	(8)	<0.411	<0.387	<0.537	<0.434	<0.419
cis-1,2-DCE	1.56E+02	(1)	7.08E+02	(5)	1.84E-01	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
cis-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Dibromochloromethane	1.39E+01	(1)	6.74E+01	(4)	7.54E-03	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Dibromomethane	2.30E+01	(2)	9.80E+01	(6)	4.00E-02	(9)	<1.62	<1.53	<2.12	<1.71	<1.66
Dichlorodifluoromethane	1.82E+02	(1)	1.61E+02	(5)	7.23E+00	(8)	<0.947	<0.892	<1.24	<0.999	<0.967
Ethylbenzene	7.51E+01	(1)	3.68E+02	(4)	2.62E-01	(8)	0.990 J	0.535 J	1.22 J	1.25	0.952 J
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.370	<0.348	<0.484	<0.390	<0.377
Isopropylbenzene	2.36E+03	(1)	2.74E+03	(5)	1.14E+01	(8)	<0.204	<0.192	<0.267	<0.215	<0.208
Methyl tert-butyl ether (MTBE)	9.75E+02	(1)	4.82E+03	(4)	5.53E-01	(8)	<0.273	<0.257	<0.356	<0.287	<0.278
Methylene chloride	4.09E+02	(1)	1.21E+03	(5)	4.71E-01	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
n-Butylbenzene	3.90E+03	(2)	5.80E+04	(6)	6.40E+01	(9)	<0.395	<0.372	<0.517	<0.417	<0.403

Table 3
Soil Analytical Results - June 14, 2016
WWTP Carbon Canister Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	WWTP-CC-5 (0-6")	WWTP-CC-6 (0-6")	WWTP-CC-7 (0-6")	WWTP-CC-8 (0-6")	WWTP-CC-9 (0-6")
Hall Environmental Analytical Lab ID							1606819-001	1606819-002	1606819-003	1606819-004	1606819-005
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
n-Propylbenzene	3.80E+03	(2)	2.40E+04	(6)	2.40E+01	(9)	<0.290	<0.274	<0.380	<0.306	<0.296
sec-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	1.18E+02	(9)	<0.288	<0.271	<0.377	<0.304	<0.294
Styrene	7.26E+03	(1)	1.02E+04	(5)	2.06E+01	(8)	<0.207	<0.195	<0.271	<0.219	<0.212
tert-Butylbenzene	7.80E+03	(2)	1.20E+05	(6)	3.20E+01	(9)	<0.237	<0.223	<0.310	<0.250	<0.242
Tetrachloroethene (PCE)	1.11E+02	(1)	1.20E+02	(5)	3.21E-01	(8)	<0.213	<0.201	<0.279	<0.225	<0.218
Toluene	5.23E+03	(1)	1.40E+04	(5)	1.21E+01	(8)	3.45	2.22	4.44	4.11	3.33
trans-1,2-DCE	2.95E+02	(1)	3.05E+02	(5)	4.69E-01	(8)	<0.164	<0.154	<0.214	<0.173	<0.167
trans-1,3-Dichloropropene	2.93E+01	(1)	1.30E+02	(5)	2.80E-02	(8)	<0.196	<0.185	<0.257	<0.207	<0.200
Trichloroethene (TCE)	6.77E+00	(1)	6.90E+00	(5)	1.75E-02	(8)	<1.62	<1.53	<2.12	<1.71	<1.66
Trichlorofluoromethane	1.23E+03	(1)	1.13E+03	(5)	1.57E+01	(8)	<0.204	<0.192	<0.267	<0.215	<0.208
Vinyl chloride	7.42E-01	(1)	2.84E+01	(4)	1.35E-03	(8)	<0.427	<0.402	<2.12	<0.450	<0.436
Xylenes, Total	8.71E+02	(1)	7.98E+02	(5)	2.98E+00	(8)	3.55	1.91	4.65	4.53	3.39
EPA Method 8270C - mg/kg ***											
1,2,4-Trichlorobenzene	8.29E+01	(1)	7.91E+01	(5)	1.76E-01	(8)	<0.22	<0.21	<0.22	<0.22	<0.22
1,2-Dichlorobenzene	2.15E+03	(1)	2.50E+03	(5)	4.58E+00	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
1,3-Dichlorobenzene	-	-	-	-	-	-	<0.15	<0.15	<0.15	<0.15	<0.15
1,4-Dichlorobenzene	3.28E+01	(1)	1.59E+02	(4)	7.20E-02	(8)	<0.17	<0.17	<0.17	<0.17	<0.17
1-Methylnaphthalene	1.80E+02	(3)	7.30E+02	(7)	1.16E-01	(9)	<0.20	<0.20	<0.20	<0.20	<0.20
2,4,5-Trichlorophenol	6.16E+03	(1)	2.69E+04	(5)	6.62E+01	(8)	<0.20	<0.20	<0.20	<0.20	<0.20
2,4,6-Trichlorophenol	6.16E+01	(1)	2.69E+02	(5)	6.74E-01	(8)	<0.16	<0.16	<0.17	<0.17	<0.17
2,4-Dichlorophenol	1.85E+02	(1)	8.07E+02	(5)	8.25E-01	(8)	<0.19	<0.18	<0.19	<0.19	<0.19
2,4-Dimethylphenol	1.23E+03	(1)	5.38E+03	(5)	6.45E+00	(8)	<0.22	<0.22	<0.22	<0.22	<0.22
2,4-Dinitrophenol	1.23E+02	(1)	5.38E+02	(5)	6.71E-01	(8)	<0.13	<0.13	<0.13	<0.13	<0.13
2,4-Dinitrotoluene	1.71E+01	(1)	8.23E+01	(4)	4.91E-02	(8)	<0.18	<0.18	<0.18	<0.18	<0.18
2,6-Dinitrotoluene	3.56E+00	(1)	1.72E+01	(4)	1.02E-02	(8)	<0.21	<0.21	<0.21	<0.21	<0.21
2-Chloronaphthalene	6.26E+03	(1)	2.83E+04	(5)	5.70E+01	(8)	<0.16	<0.16	<0.16	<0.16	<0.16
2-Chlorophenol	3.91E+02	(1)	1.77E+03	(5)	1.15E+00	(8)	<0.16	<0.16	<0.16	<0.16	<0.16
2-Methylnaphthalene	2.40E+02	(2)	3.00E+03	(6)	3.80E+00	(9)	<0.24	<0.24	<0.24	<0.24	<0.24
2-Methylphenol (cresol,o-)	3.20E+03	(2)	4.10E+04	(6)	1.50E+01	(9)	<0.17	<0.17	<0.17	<0.17	<0.17
2-Nitroaniline	6.30E+02	(2)	8.00E+03	(6)	1.60E+00	(9)	<0.21	<0.21	<0.21	<0.22	<0.21
2-Nitrophenol	-	-	-	-	-	-	<0.20	<0.20	<0.20	<0.20	<0.20
3,3'-Dichlorobenzidine	1.18E+01	(1)	5.70E+01	(4)	1.23E-01	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
3+4-Methylphenol	-	-	-	-	-	-	<0.14	<0.14	<0.14	<0.15	<0.14
3-Nitroaniline	-	-	-	-	-	-	<0.18	<0.17	<0.18	<0.18	<0.18
4,6-Dinitro-2-methylphenol	4.93E+00	(1)	2.15E+01	(5)	3.94E-02	(8)	<0.12	<0.12	<0.12	<0.12	<0.12
4-Bromophenyl phenyl ether	-	-	-	-	-	-	<0.19	<0.19	<0.19	<0.19	<0.19
4-Chloro-3-methylphenol	-	-	-	-	-	-	<0.24	<0.24	<0.24	<0.24	<0.24
4-Chloroaniline	2.70E+01	(3)	1.10E+02	(7)	3.20E-03	(9)	<0.22	<0.22	<0.22	<0.22	<0.22

Table 3
Soil Analytical Results - June 14, 2016
WWTP Carbon Canister Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	WWTP-CC-5 (0-6")	WWTP-CC-6 (0-6")	WWTP-CC-7 (0-6")	WWTP-CC-8 (0-6")	WWTP-CC-9 (0-6")
Hall Environmental Analytical Lab ID							1606819-001	1606819-002	1606819-003	1606819-004	1606819-005
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	<0.23	<0.23	<0.23	<0.23	<0.23
4-Nitroaniline	2.70E+02	(3)	1.10E+03	(7)	3.20E-02	(9)	<0.14	<0.14	<0.14	<0.14	<0.14
4-Nitrophenol	-	-	-	-	-	-	<0.15	<0.15	<0.15	<0.15	<0.15
Acenaphthene	3.48E+03	(1)	1.51E+04	(5)	8.25E+01	(8)	<0.17	<0.17	<0.17	<0.17	<0.17
Acenaphthylene	-	-	-	-	-	-	<0.16	<0.16	<0.16	<0.16	<0.16
Aniline	9.50E+02	(3)	4.00E+03	(7)	9.20E-02	(9)	<0.19	<0.19	<0.19	<0.19	<0.19
Anthracene	1.74E+04	(1)	7.53E+04	(5)	8.51E+02	(8)	<0.13	<0.13	<0.13	<0.13	<0.13
Azobenzene	5.60E+01	(3)	2.60E+02	(7)	1.84E+06	(9)	<0.24	<0.24	<0.24	<0.24	<0.24
Benz(a)anthracene	1.53E+00	(1)	3.23E+01	(4)	1.82E+00	(8)	<0.17	<0.17	<0.17	<0.17	<0.17
Benzo(a)pyrene	1.53E-01	(1)	3.23E+00	(4)	6.05E-01	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
Benzo(b)fluoranthene	1.53E+00	(1)	3.23E+01	(4)	6.17E+00	(8)	<0.18	<0.18	<0.18	<0.18	<0.18
Benzo(g,h,i)perylene	-	-	-	-	-	-	<0.18	<0.17	<0.18	<0.18	<0.18
Benzo(k)fluoranthene	1.53E+01	(1)	3.23E+02	(4)	6.05E+01	(8)	<0.18	<0.17	<0.18	<0.18	<0.18
Benzoic acid	2.50E+05	(2)	3.30E+06	(6)	3.60E+02	(9)	<0.16	<0.16	<0.17	<0.17	<0.17
Benzyl alcohol	6.30E+03	(2)	8.20E+04	(6)	9.60E+00	(9)	<0.16	<0.16	<0.16	<0.16	<0.16
Bis(2-chloroethoxy)methane	1.90E+02	(2)	2.50E+03	(6)	2.60E-01	(9)	<0.22	<0.21	<0.22	<0.22	<0.22
Bis(2-chloroethyl)ether	3.11E+00	(1)	1.95E+00	(5)	6.05E-04	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
Bis(2-chloroisopropyl)ether	9.93E+01	(1)	5.19E+02	(4)	4.73E-02	(8)	<0.18	<0.18	<0.18	<0.18	<0.18
Bis(2-ethylhexyl)phthalate	3.80E+02	(1)	1.83E+03	(4)	2.00E+02	(8)	<0.16	<0.16	<0.16	<0.16	<0.16
Butyl benzyl phthalate	2.90E+03	(3)	1.20E+04	(7)	4.60E+00	(9)	<0.18	<0.18	<0.18	<0.18	<0.18
Carbazole	-	-	-	-	-	-	<0.13	<0.13	<0.13	<0.14	<0.13
Chrysene	1.53E+02	(1)	3.23E+03	(4)	1.86E+02	(8)	<0.17	<0.17	<0.17	<0.17	<0.17
Dibenz(a,h)anthracene	1.53E-01	(1)	3.23E+00	(4)	6.11E+00	(8)	<0.16	<0.16	<0.16	<0.16	<0.16
Dibenzofuran	-	-	-	-	-	-	<0.20	<0.20	<0.20	<0.20	<0.20
Diethyl phthalate	4.93E+04	(1)	2.15E+05	(5)	9.79E+01	(8)	<0.20	<0.20	<0.20	<0.20	<0.20
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(5)	1.61E+03	(8)	<0.19	<0.19	<0.19	<0.20	<0.19
Di-n-butyl phthalate	6.16E+03	(1)	2.69E+04	(5)	3.38E+01	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
Di-n-octyl phthalate	-	-	-	-	-	-	<0.17	<0.17	0.17 J	<0.17	<0.17
Fluoranthene	2.32E+03	(1)	1.00E+04	(5)	1.34E+03	(8)	<0.11	<0.11	<0.11	<0.12	<0.11
Fluorene	2.32E+03	(1)	1.00E+04	(5)	8.00E+01	(8)	<0.18	<0.18	<0.18	<0.18	<0.18
Hexachlorobenzene	3.33E+00	(1)	1.60E+01	(4)	9.22E-02	(8)	<0.16	<0.16	<0.16	<0.16	<0.16
Hexachlorobutadiene	6.16E+01	(1)	2.69E+02	(5)	8.79E-02	(8)	<0.22	<0.22	<0.22	<0.23	<0.22
Hexachlorocyclopentadiene	3.70E+02	(1)	8.67E+02	(5)	1.34E+00	(8)	<0.23	<0.23	<0.23	<0.23	<0.23
Hexachloroethane	4.31E+01	(1)	1.88E+02	(5)	6.62E-02	(8)	<0.17	<0.17	<0.17	<0.17	<0.17
Indeno(1,2,3-cd)pyrene	1.53E+00	(1)	3.23E+01	(4)	2.01E+01	(8)	<0.16	<0.15	<0.16	<0.16	<0.16
Naphthalene	4.97E+01	(1)	1.59E+02	(5)	8.23E-02	(8)	<0.19	<0.19	<0.19	<0.19	<0.19
Nitrobenzene	6.04E+01	(1)	2.93E+02	(4)	1.44E-02	(8)	<0.21	<0.20	<0.21	<0.21	<0.21
N-Nitrosodi-n-propylamine	7.80E-01	(3)	3.30E+00	(7)	1.62E-04	(9)	<0.19	<0.19	<0.19	<0.19	<0.19

Table 3
Soil Analytical Results - June 14, 2016
WWTP Carbon Canister Release
Western Refining Southwest - Gallup Refinery

Parameter Name	Residential Soil (mg/kg)	Source	Non- Residential Soil Screening Level (mg/kg)	Source	Risk Based SSL for a DAF of 20 (mg/kg)	Source	WWTP-CC-5 (0-6")	WWTP-CC-6 (0-6")	WWTP-CC-7 (0-6")	WWTP-CC-8 (0-6")	WWTP-CC-9 (0-6")
Hall Environmental Analytical Lab ID							1606819-001	1606819-002	1606819-003	1606819-004	1606819-005
Sample Date							6/14/2016	6/14/2016	6/14/2016	6/14/2016	6/14/2016
N-Nitrosodiphenylamine	7.94E-03	(1)	1.71E-01	(4)	9.84E-06	(8)	<0.19	<0.19	<0.19	<0.20	<0.19
Pentachlorophenol	9.85E+00	(1)	4.45E+01	(4)	6.08E-02	(8)	<0.13	<0.13	<0.13	<0.13	<0.13
Phenanthrene	1.74E+03	(1)	7.53E+03	(5)	8.59E+01	(8)	<0.14	<0.13	<0.14	<0.14	<0.14
Phenol	1.83E+04	(1)	7.74E+04	(5)	5.23E+01	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
Pyrene	1.74E+03	(1)	7.53E+03	(5)	1.92E+02	(8)	<0.15	<0.15	<0.15	<0.15	<0.15
Pyridine	7.80E+01	(2)	1.20E+03	(6)	1.36E-01	(9)	<0.16	<0.16	<0.16	<0.16	<0.16

- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (July 2015)

EPA - Regional Screening Levels (Nov 2015)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(4) NMED Industrial Occupational Screening Level

(5) NMED Construction Worker Screening Level

(6) EPA Industrial - Screening Levels (June 2015)

(7) EPA Industrial - Screening Levels June 2015) multiplied by 10 pursuant to Section IV.D.2 of the Oct. 31, 2013 RCRA Post-Closure Permit because the constituent is listed as carcinogenic

(8) SoilGW NMED Dilution Attenuation Factor (DAF) = 20

(9) SoilGW Risk-based EPA DAF = 20

(10) SoilGW MCL-based EPA DAF = 20

Bold represents value above Non-Residential Screening Level

yellow highlight represents value above Leachate (DAF) 20 Screening Level

Bold with yellow highlight value exceeds Non-Residential Screening Level and DAF 20

Laboratory data flags

J - Analyte detected below quantitation limits

E - Value above quantitation limits

EPA Method 8270C - mg/kg *** - All data was flagged with "D" - Sample diluted due to matrix

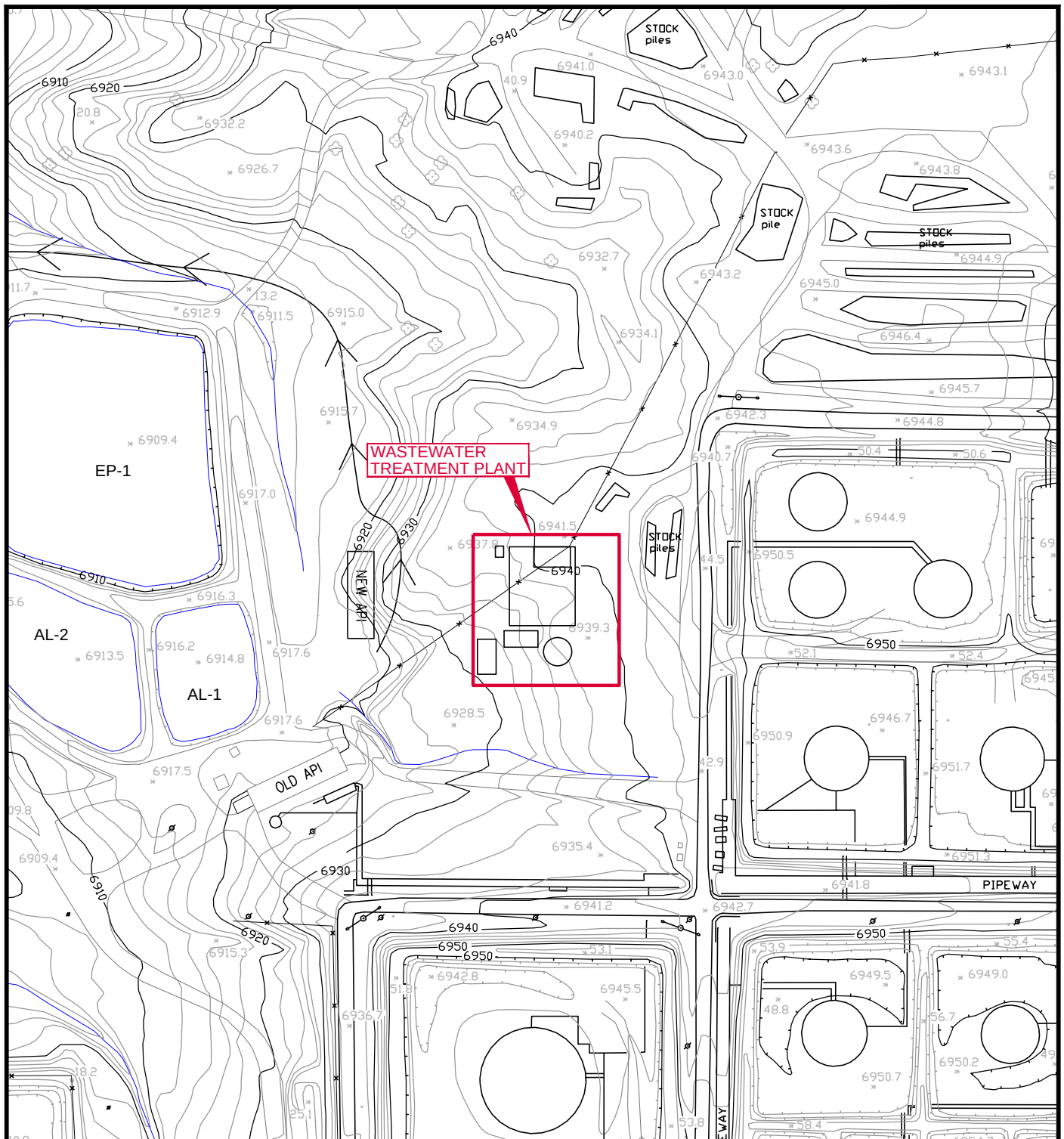
Figures

Figure 1 Site Location Map

Figure 2 Aerial Photo of Wastewater Treatment Plant

Figure 3 Extent of Spill

Figure 4 Soil Sampling Locations



Map Source: Compiled by Photogrammetric Methods from Photography
Acquired on March 1, 1998.



0 150
SCALE IN FEET



QUADRANGLE LOCATION



PROJ. NO.: Western Refining | DATE: 07/06/16 | FILE: WestRef-dA47

FIGURE 1 SITE LOCATION MAP WASTEWATER TREATMENT PLANT



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016



0 350
SCALE IN FEET



QUADRANGLE LOCATION

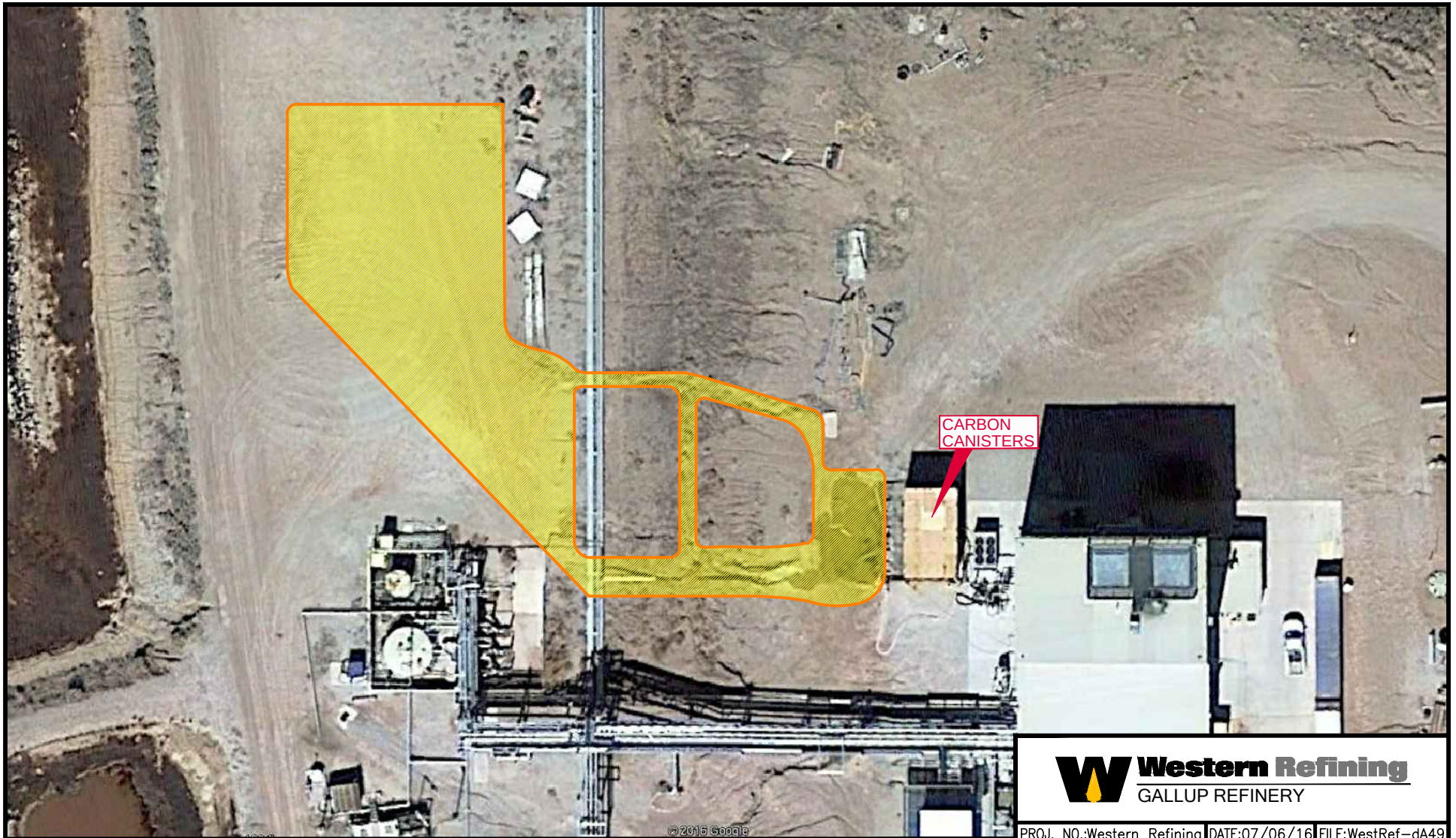


PROJ. NO.:Western Refining DATE:07/06/16 FILE:WestRef-dA48

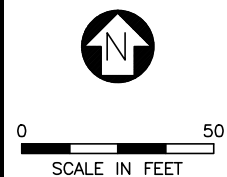
FIGURE 2
AERIAL PHOTO OF
WASTEWATER TREATMENT PLANT



8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016



LEGEND
 EXTENT OF SPILL



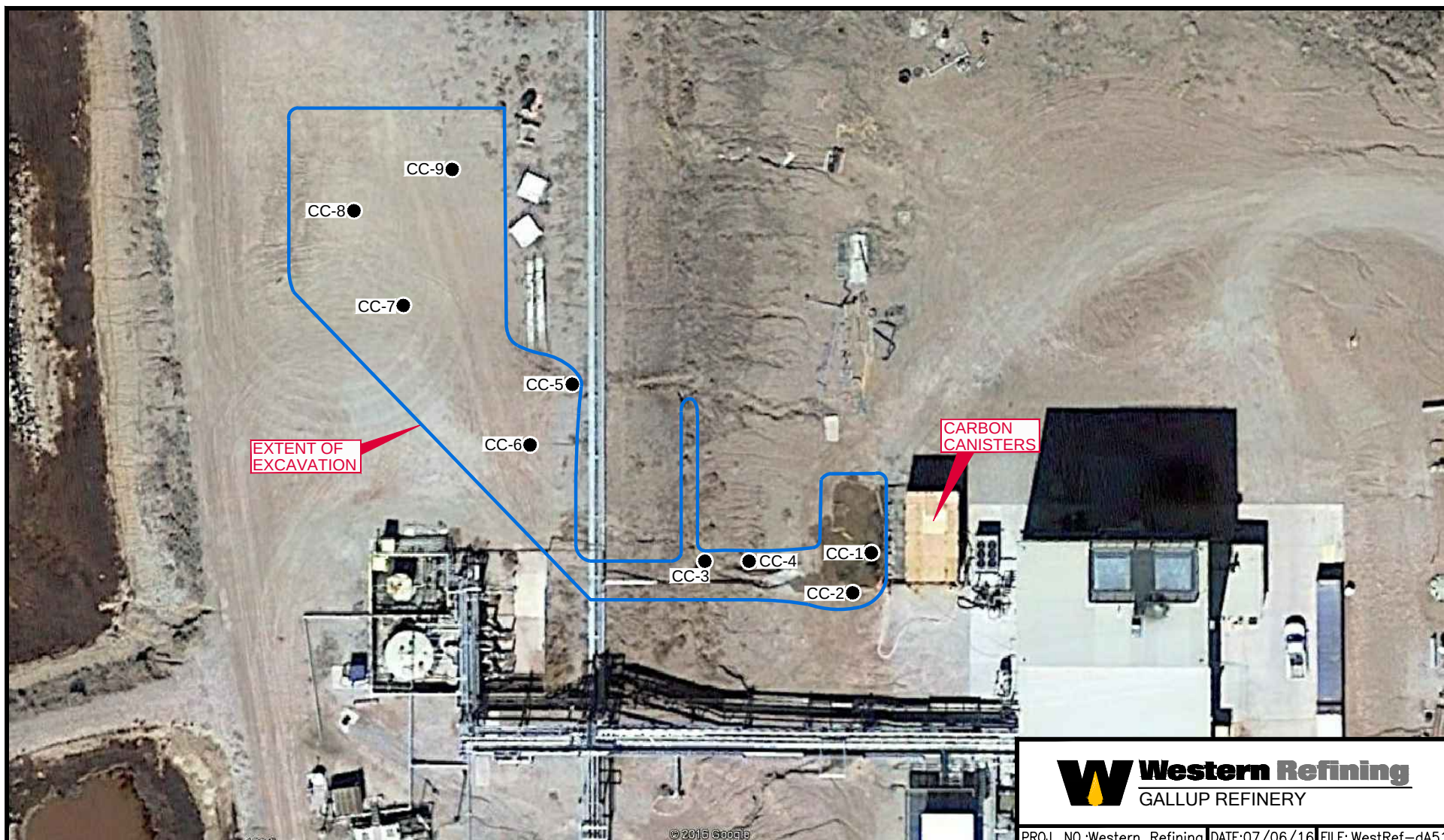
Western Refining
 GALLUP REFINERY

PROJ. NO.:Western Refining DATE:07/06/16 FILE:WestRef-dA49

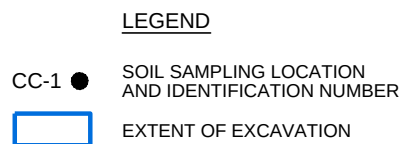
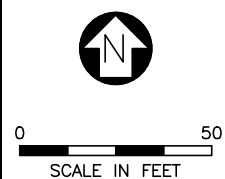
FIGURE 3
 EXTENT OF SPILL
 WASTEWATER TREATMENT PLANT
 CARBON CANISTER

DiSorbo
 Environmental Consulting Firm

8501 N. MoPac Expy.
 Suite 300
 Austin, Texas 78759



Aerial Source: Google Maps, 03/18/2016



Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 07/06/16 | FILE: WestRef-dA51

FIGURE 4
SOIL SAMPLING LOCATIONS
WASTEWATER TREATMENT PLANT

DiSorbo
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

Appendix A
Western Refining – Gallup Refinery
Calculations of Volumes Released

Appendix A-1
Western Refining – Gallup Refinery
January 19, 2016 Internal E-Mail
Calculation of Volume Released
December 27, 2015 Release

Larsen, Thurman

From: Walters, Lucas
Sent: Tuesday, January 19, 2016 8:48 AM
To: Larsen, Thurman
Subject: RE: Carbon Canister Spill from Rupture Disk of 12-27-2015

Beck,

The calculation for the carbon canister leak was approached in the following manner:

Assumptions:

- 1) The carbon canister rupture disk ruptured immediately after the carbon canisters were put online. There is pressure indication on the inlet to the carbon canisters but does not reflect when the disk would have ruptured. With this in mind, the worst case scenario was taken into account. Time noted on operator log was 4:00 pm.
- 2) The flow was stopped immediately once the outside operator noticed the disk. Time noted on operator log was 4:35 pm.
- 3) Flow meter 84fc901 average for this time period was 190.3 GPM. It is the flow meter that goes to though both sets of filters and then the carbon canisters.

The maximum volume that could have leaked out of the rupture disk would be $190.3 \text{ GPM} * 35 \text{ min} = 6660.5 \text{ gallons}$ or 158.5 barrels. Let me know if you need anything else.

Lucas

From: Walters, Lucas
Sent: Tuesday, January 19, 2016 8:27 AM
To: Larsen, Thurman
Subject: RE: Carbon Canister Spill from Rupture Disk of 12-27-2015

Give me about 20 minutes.

Lucas

From: Larsen, Thurman
Sent: Tuesday, January 19, 2016 8:18 AM
To: Walters, Lucas
Subject: Carbon Canister Spill from Rupture Disk of 12-27-2015

Lucas,

Do you have any calculations or any additional information to contribute that I could use concerning the carbon canister spill that occurred on 12-27-15 due to the rupture disk? I am working on a report to the agency.

Thanks,

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

Appendix A-2
Western Refining – Gallup Refinery
January 8, 2016 Interoffice Memorandum
Initial Calculation of Volume Released
January 7, 2016 Release



INTEROFFICE
MEMORANDUM

Date: Friday, January 8, 2016
To: Andy Green, Process Safety Manager
From: Danyelle Montalvo, Process Engineer
Subject: **Carbon Canister Leak**

On 1/7/2016 at 11:00 PM a rupture disk on the south Carbon Canister failed causing water not filtered through the carbon canisters to spill onto the ground.

According to Pi Data, the disk ruptured around 10:37 and the total time was taken to be 19 minutes in which an average flow of 90 gpm was being pumped to the canisters. This equates to approximately 1710 gallons of water released which equals 43 barrels of water released.

At this time, I do not have compositional information about the benzene content of the water spilled but on 11/12/2015 I requested an analysis to be run on water from the waste water treatment plant before the carbon canisters. Results were as follows:

Benzene = 3.75365
Toluene = 2.40118
Ethylbenzene = 7.41332e-1
M,P xylene = 1.09132
O xylene = 1.09254

All results are in ppm.

If you have any questions please contact me at Danyelle.Montalvo@wnr.com or call me at (505) 726-9724.

Appendix A-3
Western Refining – Gallup Refinery
January 22, 2016 Internal Email
Revised Calculation of Volume Released
January 7, 2016 Release

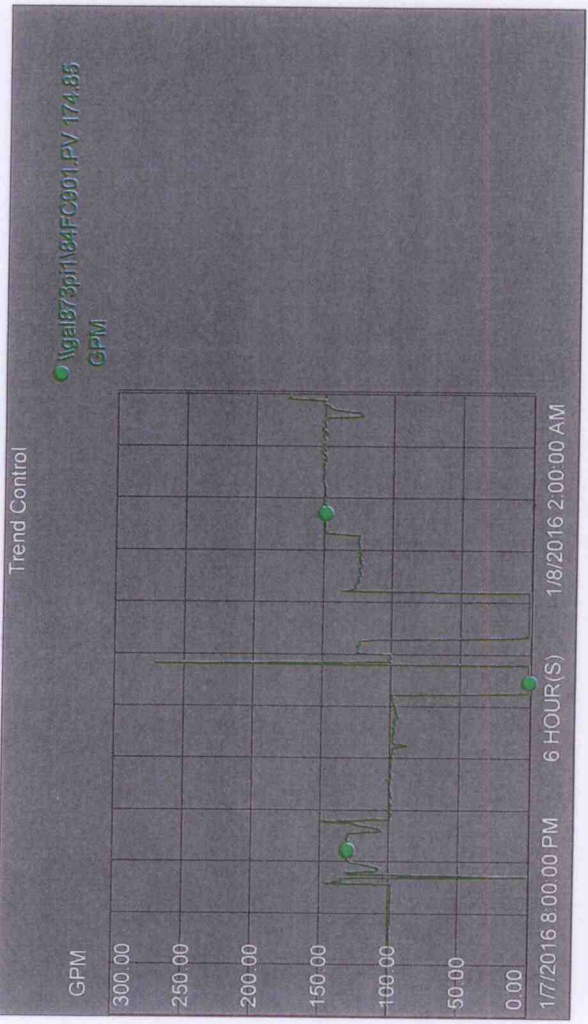
Larsen, Thurman

From: Montalvo, Danyelle
Sent: Friday, January 22, 2016 2:03 PM
To: Larsen, Thurman
Subject: Carbon Canister Calculations
Attachments: CarbonCanisterCalculations.xlsx

Beck,

Attached is the excel spreadsheet I used to calculate the volume of water released from the unit to the ground. My initial calculation was 1710 gallons of water using 90 gpm for 19 minutes. Upon reevaluation of the pi data, I determined the average flow rate during the time of the spill was 96.6 gpm for 20 minutes. This gives the total volume of water released to be 1932 gallons of water or 46 bbls. If you have any questions please let me know.

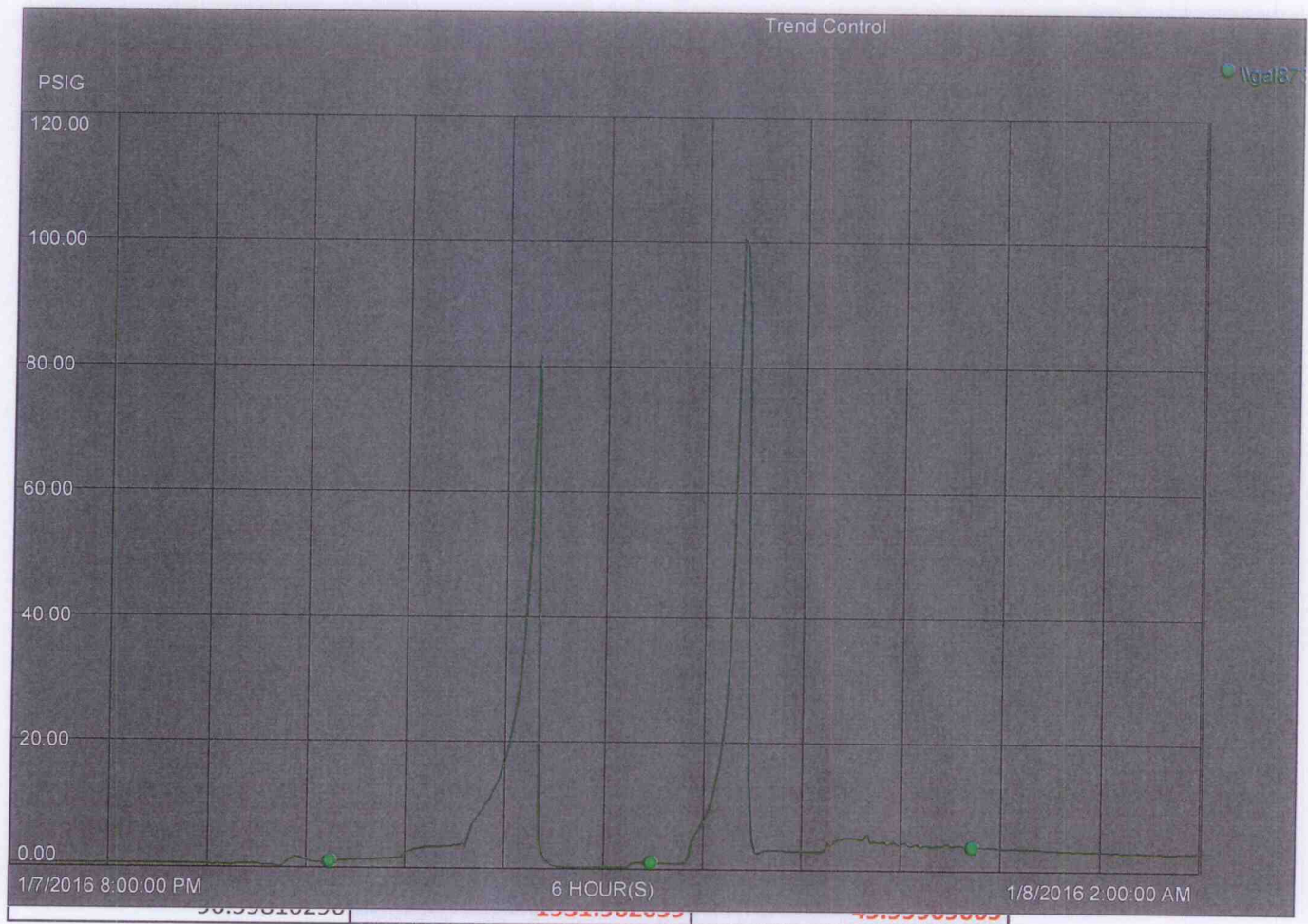
Thank you
Danyelle Montalvo



Time	Flow(GPM)
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07-Jan-16 20:01:05	99.47885132
07-Jan-16 20:02:05	99.22366333
07-Jan-16 20:03:05	99.1255188
07-Jan-16 20:04:05	99.39051819
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07-Jan-16 20:20:05	98.53665161
07-Jan-16 20:21:05	98.98812866
07-Jan-16 20:22:05	98.83108521
07-Jan-16 20:23:05	99.13534546
07-Jan-16 20:24:05	98.67405701
07-Jan-16 20:25:05	98.57589722
07-Jan-16 20:26:05	98.8212738
07-Jan-16 20:27:05	98.50720215
07-Jan-16 20:28:05	98.75256348
07-Jan-16 20:29:05	98.57589722
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07-Jan-16 20:31:05	98.59553528
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07-Jan-16 20:43:05	98.13424683
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08-Jan-16 00:52:05	147.9137573	



Second Pressure Peak

Maximum Value

07-Jan-16 23:41:01

100.7750626

\\gals73or184_F\001 PV 2.99 PSIG

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07-Jan-16 20:19:41	0.53828162
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07-Jan-16 20:28:45	0.530697763
07-Jan-16 20:29:45	0.508969128
07-Jan-16 20:30:45	0.513064384
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07-Jan-16 20:36:48	0.509730995
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07-Jan-16 20:49:53	0.481542081
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07-Jan-16 22:22:30	8.412516594
07-Jan-16 22:23:30	9.158793449
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07-Jan-16 22:47:40	0.231084451
07-Jan-16 22:48:40	0.189980745
07-Jan-16 22:49:41	0.179834783
07-Jan-16 22:50:41	0.167944372
07-Jan-16 22:51:41	0.167315185
07-Jan-16 22:52:42	0.16700165
07-Jan-16 22:53:42	0.161537945
07-Jan-16 22:54:43	0.161087975
07-Jan-16 22:55:43	0.160791665
07-Jan-16 22:56:43	0.165958807
07-Jan-16 22:57:44	0.164556801
07-Jan-16 22:58:44	0.168290064
07-Jan-16 22:59:45	0.164385706

07-Jan-16 23:00:45	0.159574717
07-Jan-16 23:01:45	0.157108456
07-Jan-16 23:02:46	0.156824246
07-Jan-16 23:03:46	0.156375915
07-Jan-16 23:04:47	0.14766103
07-Jan-16 23:05:47	0.147696421
07-Jan-16 23:06:47	0.144765079
07-Jan-16 23:07:48	0.14821434
07-Jan-16 23:08:48	0.810901582
07-Jan-16 23:09:49	0.936070979
07-Jan-16 23:10:49	0.934001327
07-Jan-16 23:11:49	0.929456949
07-Jan-16 23:12:50	0.921244621
07-Jan-16 23:13:50	0.913515091
07-Jan-16 23:14:51	0.912374377
07-Jan-16 23:15:51	0.900769234
07-Jan-16 23:16:51	0.899074435
07-Jan-16 23:17:52	0.893960476
07-Jan-16 23:18:52	0.887475312
07-Jan-16 23:19:53	0.882571936
07-Jan-16 23:20:53	0.877883196
07-Jan-16 23:21:53	0.874494851
07-Jan-16 23:22:54	0.874216795
07-Jan-16 23:23:54	0.867743075
07-Jan-16 23:24:55	0.86063391
07-Jan-16 23:25:55	2.107180834
07-Jan-16 23:26:55	4.514848709
07-Jan-16 23:27:56	5.440156937
07-Jan-16 23:28:56	6.227134228
07-Jan-16 23:29:57	7.149587154
07-Jan-16 23:30:57	8.156947136
07-Jan-16 23:31:57	9.468972206
07-Jan-16 23:32:58	11.27537441
07-Jan-16 23:33:58	13.52650738
07-Jan-16 23:34:59	16.46883774
07-Jan-16 23:35:59	20.41456032
07-Jan-16 23:36:59	26.02578545
07-Jan-16 23:38:00	34.66747284
07-Jan-16 23:39:00	49.65742111
07-Jan-16 23:40:01	79.59142303
07-Jan-16 23:41:01	100.7750626
07-Jan-16 23:42:01	99.55795288
07-Jan-16 23:43:02	89.04330444
07-Jan-16 23:44:02	14.24222469
07-Jan-16 23:45:03	4.614272594
07-Jan-16 23:46:03	2.493754864
07-Jan-16 23:47:03	2.56197834

07-Jan-16 23:48:04	2.80908823
07-Jan-16 23:49:04	2.968019485
07-Jan-16 23:50:05	2.957670927
07-Jan-16 23:51:05	2.961172581
07-Jan-16 23:52:05	2.96134901
07-Jan-16 23:53:06	2.963051319
07-Jan-16 23:54:06	2.966330528
07-Jan-16 23:55:07	2.96336031
07-Jan-16 23:56:07	2.927155972
07-Jan-16 23:57:07	2.928067446
07-Jan-16 23:58:08	2.920770884
07-Jan-16 23:59:08	2.918017626
08-Jan-16 00:00:09	2.916091204
08-Jan-16 00:01:09	2.911885023
08-Jan-16 00:02:09	2.90597868
08-Jan-16 00:03:10	2.902723789
08-Jan-16 00:04:10	2.899307013
08-Jan-16 00:05:11	2.894847631
08-Jan-16 00:06:11	2.892737627
08-Jan-16 00:07:11	2.887095213
08-Jan-16 00:08:12	4.251769543
08-Jan-16 00:09:12	3.795547724
08-Jan-16 00:10:13	4.604286194
08-Jan-16 00:11:13	4.837873936
08-Jan-16 00:12:13	4.949209213
08-Jan-16 00:13:14	5.005445004
08-Jan-16 00:14:14	5.000757694
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08-Jan-16 00:16:15	4.989853859
08-Jan-16 00:17:15	4.930081844
08-Jan-16 00:18:16	4.846892834
08-Jan-16 00:19:16	4.969539165
08-Jan-16 00:20:17	5.601456165
08-Jan-16 00:21:17	4.256267071
08-Jan-16 00:22:17	4.628962994
08-Jan-16 00:23:18	4.32664299
08-Jan-16 00:24:18	4.311917305
08-Jan-16 00:25:19	4.506968498
08-Jan-16 00:26:19	3.988315582
08-Jan-16 00:27:19	4.193934441
08-Jan-16 00:28:20	4.444000721
08-Jan-16 00:29:20	3.988075733
08-Jan-16 00:30:21	3.999811888
08-Jan-16 00:31:21	4.3312006
08-Jan-16 00:32:21	3.990289927
08-Jan-16 00:33:22	3.785595179
08-Jan-16 00:34:22	3.966498375

08-Jan-16 00:35:23	4.08033371
08-Jan-16 00:36:23	3.664823532
08-Jan-16 00:37:23	3.898926497
08-Jan-16 00:38:24	3.895481586
08-Jan-16 00:39:24	3.702769995
08-Jan-16 00:40:25	3.831291914
08-Jan-16 00:41:25	3.963880539
08-Jan-16 00:42:25	3.823042154
08-Jan-16 00:43:26	4.101521492
08-Jan-16 00:44:26	4.209320545
08-Jan-16 00:45:27	3.751320839
08-Jan-16 00:46:27	3.869447947
08-Jan-16 00:47:27	3.876782417
08-Jan-16 00:48:28	4.069939137
08-Jan-16 00:49:28	3.668307066
08-Jan-16 00:50:29	3.830862045
08-Jan-16 00:51:29	3.661801338
08-Jan-16 00:52:29	3.775956869
08-Jan-16 00:53:30	3.689101934
08-Jan-16 00:54:30	3.783144951
08-Jan-16 00:55:31	3.583061934
08-Jan-16 00:56:31	3.545837402
08-Jan-16 00:57:31	3.533724785
08-Jan-16 00:58:32	3.514775991
08-Jan-16 00:59:32	3.489734888
08-Jan-16 01:00:33	3.494845629
08-Jan-16 01:01:33	3.481063366
08-Jan-16 01:02:33	3.453320026
08-Jan-16 01:03:34	3.459493399
08-Jan-16 01:04:34	3.430684566
08-Jan-16 01:05:35	3.419935942
08-Jan-16 01:06:35	3.371866465
08-Jan-16 01:07:35	3.361421585
08-Jan-16 01:08:36	3.412095547
08-Jan-16 01:09:36	3.35561347
08-Jan-16 01:10:37	3.33713007
08-Jan-16 01:11:37	3.304203749
08-Jan-16 01:12:37	3.3027246
08-Jan-16 01:13:38	3.249879837
08-Jan-16 01:14:38	3.251569748
08-Jan-16 01:15:39	3.230522871
08-Jan-16 01:16:39	3.185128212
08-Jan-16 01:17:39	3.200577259
08-Jan-16 01:18:40	3.140982389
08-Jan-16 01:19:40	3.120877028
08-Jan-16 01:20:41	3.108528614
08-Jan-16 01:21:41	3.077381372

DATE: 01/08/16

5:10am

Shift Superintendent	6:30AM-6:30PM Frank Hausner	6:30PM-6:30AM Garry Moore
Offsites Shift Supervisor	Peter Tom	Rodney James



120 Days Since Last OSHA Recordable Injury

%LVR

103.91

511a-Quick attack truck ,511a-south carbon canister ruptur disk,

ENVIRONMENTAL:

QUALITY:

ESD/FALSE PV/PSV STATUS: Closure for PSV 12 St. run line in treaters Closure in the RSMs office.

STREAM	24 hr avg	Current	Plan	CONSTRAINTS
Crude Rate, BPD	25,672	25,707	25,700	Meeting the Daily Plan
Tank 101 Feed	13,565	13,379	13,600	OPERATIONAL COMMENTS
Tank 102 Feed	11,800	12,000	11,800	
Rerun Oil Feed	326	328	300	
CDU Products, BPD	26,520	27,207		
OVHD Gas, SCFD	640	624		
LPG	531	619		
LSR Gasoline	2,469	2,817		
Naphtha	6,661	6,637		
Kero	4,550	4,549		
Diesel	1,750	1,748		
Column Bottoms	10,559	10,837		
FCCU Rate, BPD	8,200	8,198	8,200	CONSTRAINTS
Trans Mix Feed	-3	-3	0	Meeting the Daily Plan
Feed - Hot	4,937	4,806		OPERATIONAL COMMENTS
Feed - Cold	3,777	3,929		
Sponge Gas	1,096	990		
Cat Gasoline	5,288	5,332		
LCO	1,570	1,525		
Slurry To Storage	319	298		
Slurry Flash	110	111		
Riser Temperature (F)	938	938	936	
Feed Temperature (F)	438	437	440	
Catalyst Loaded (lbs/day)	6,000	1,498	6,000	
Highest CO Emissions 1-hr Ave (ppm)	41	2	500 MAX	
ALKY Rate, BPD	3,082	3,102		CONSTRAINTS
Alkylate Production	1,798	1,811		Pacing production.
Olefin feed	2,296	2,213		OPERATIONAL COMMENTS
Olefin feed from storage	107	107	100	
IC4 feed	985	1,000		
Acid Strength (%)	97	97		
Contactore Temperature (F)	92	91		
Butane Production	386	373		
Propane to Storage (BPD)	567	460		
				1. Maintenance recharged A-V41-on stand-by
Platformer Rate, BPD	6,560	6,598	6,600	CONSTRAINTS
Octane (RON)	91.64	91.60	91.50	Meeting Daily Plan
WAIT (F)	939	939		OPERATIONAL COMMENTS
Stabilizer Off Gas (KSCFD)	421	421		
Stabilizer LPG	255	246		
Platformate	5,497	5,529		
Rx Effluent Pressure (PSIG)	344	344		
H2 Recycle Rate (MMSCFD)	49	49		
Naphtha from storage	1,500	1,497		
NHT Rx Charge Rate	5,857	5,786		
NHT H2 Feed Rate (KSCFD)	3,400	3,398		
NHT Stripper LPG	725	575		
Sweet Naphtha to Storage	4	4	0	
NHT Rx Delta T (In - Out)	15	15		
NHT Rx Delta P (In - Out)	17	17		
Plat Recycle H2 to oil Ratio (scf/bbl)	7	7		
Charge to MSAT Column (BPD)	0	0		
MSAT Light Naphtha (BPD)	0	0		
Off Gas to SATS(MSCFD)	348	306		

STREAM	24 hr avg	Current	Plan	CONSTRAINTS
ULSD Feed Rate, BPD	7,300	7,304	7,300	CONSTRAINTS
DHT Feed:	3,300	3,302	3,300	Meeting the Daily Plan
KHT Feed:	4,000	4,002	4,000	
DHT Feed % LCO:	62.26%	62.86%	63%	OPERATIONAL COMMENTS
Deisel from Tk-225:	1,189	1,200	1300	
Kerosene from Tk-226:			0	
D-V21 Rx Delta P (PSI):				
D-H1 Heater Temp (F):	724	725		
D-H2 Heater Temp (F):	620	620		
D-H3 Heater Temp (F):	724	725		
ULSD Bottoms Total:	8,046	1,733		
DHT Recycle/Feed Ratio:	2.2	2.2		
KHT Recycle/Feed Ratio:	1.9	1.9		
Diesel Product Sulfur (ppm):	10	7	10-12	
SWAATS				CONSTRAINTS
Amine Circulation (GPM):	34	34		Pacing production.
AM-V12 Surge Drum Lvl (%):	171	170		
A.G. to Flare (% open):	-5	-5		OPERATIONAL COMMENTS
A.G. to SRU (KSCFD):	24	18		
SWS Feed Rate (GPM):	32	32		
Sour Water Tank Level (%):	35	35		
Amine A.G. to Thiosolv (KSCFD):	54	56		
Thiosolv A.G. to BN1 (lbs/hr):	375	383		
Fuel Gas H2S (ppm):	25	29	60 MAX	
SATS, BPD				CONSTRAINTS
Feed to Comp (MMSCFD):	1.06	0.97		Pacing production.
Inlet Liquids (BPD):	1,163	1,219		OPERATIONAL COMMENTS
Propane to Storage (BPD):	257	245		1. Mechanics repaired S-C2-Back online.
Butane to Storage (BPD):	734	730		
Iso to Storage (BPD):	212	218		
Utilities, Mlbs/hr	142	135		CONSTRAINTS
B-102:	30	29		
B-104:	15	14		OPERATIONAL COMMENTS
B-105:	14	14		
B-106:	40	36		
CO Boiler:	44	43		
F.G. to Flare (% Open):	-5	-5		
Flare H2S (ppm):	30	18	150 MAX	
Flare Flowrate (kscl/hr):	43	43		
Highest Flare H2S 3-hr Ave (ppm):	23	14	162 MAX	
Flare SO2 lbs/day:	22	16	500 MAX	
Purchased Nat Gas (MCFD):	5,520	5,497		

API/FLARE			
WWTP Flow (GPM):	154	195	1. Average flow= 170 gpm through the South Canister..Continue w/Flocc issues.
WWTP pH Before MPPE:	7.7	7.7	2. Four Secondary filterschanged; (Tank 27=17'-2" & Tank 28=15'-10" @ 4pm.)
Benzene, Before(ppm):	5.8	5.8	3. Benzene: Scc=0.10 @ 8am; Scc=0.08 @ 12pm; Scc= @ 4pm.
Benzene, After (ppm):	0.00	0.00	4. Flow=200gpm thur north carbon canister.. (T27=17'-2", T28=15'-10")
			8.Filters: pm=1, Sec=2; Continue to have floc issues-maint. replaced z84-p61a pump
			9.Benzene:8pm=.01, 12am=.01
	4:00 PM	4:00 AM	
WWTP Tank 35 Level:	16'-5"	19'-2"	

TANK FARM / TRANSFERS			
Rail Car Status			1. RMF/ continues w/ repair work and ITI on inspecting.
Ethanol / Toluene/Butane:	1 Butane unloaded		2. Sun Fab completed the T-105 transfer line replacement. Flanges & Bolts were ping.
CRUDE/FCC Feed/ ATS:			3. Tank 579(007) ULSD & Tank 582(013) 83.0 base are blending.
Fuel Oil / LCO:	3 Fuel Oil loaded		4.800 bbls of isobutane ordered from wingate at 7pm
# Loaded/ Unloaded: 1 olefin			5.T-582 is blending
Crude N2 Tank Level (%)			6. T-579 did pass PP=-15, 20 gal. added. FC @ 3:30am
GASOLINE TANKS CLEARED:			7.BNSF in at 2am to switch out rail cars, area all clear.
ULSD TANK CLEARED:			
Pipeline Line Up	T101	T102	
	West/east	east	
VRU Condensor Status:			
Day Shift	Gycol/Gasoline Ck: ok		6AM - 6PM: VRU & Truck Rack ran fine; no issues.
Night Shift	Gycol/Gasoline Ck: ok		* Loaded 2 Propane trucks; Received 1 Transmix; 2 Ethanol; & 1 jet fuel trucks today.
			6PM-6AM: 2-transmix unloaded, 3-Ethanol unloaded.

Appendix B
Form C-141 Release Notification and
Corrective Action

Appendix B-1
Form C-141 – Initial and Final Reports
December 27, 2015 Release

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Western Refining Southwest Inc.	Contact: Loretta Morgan	
Address: I-40 Exit 39 Jamestown, NM 87347	Telephone No: 505-722-3833	
Facility Name: Gallup Refinery	Facility Type: Oil Refinery	
Surface Owner: Western Refining	Mineral Owner: Western Refining	Lease No.

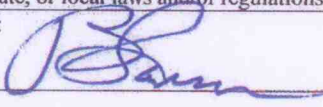
LOCATION OF RELEASE

Unit Letter	Section 23&33	Township 15N	Range 15W	Feet from the	North/South Line	Feet from the	East/West Line	County McKinley
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Latitude 35°29'22"

Longitude 108°25'24"

NATURE OF RELEASE

Type of Release: Treated Wastewater	Volume of Release: Estimate 158 barrel of wastewater	Volume Recovered: Undetermined
Source of Release: Waste Water Treatment Plant Carbon Canister	Date and Hour of Occurrence: 12/27/2015 4:00 pm	Date and Hour of Discovery: 12/27/2015 4:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	If YES, To Whom? Ruth Horowitz, NMED Hazardous Waste Bureau (phone call left message) Kristen VanHorn, NMED Hazardous Waste Bureau (phone call left message) Brandon Powell, Oil Conservation Division (phone call left message)	
By Whom? Loretta Morgan	Date and Hour: 12/27/2015 8:16 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. No, did not impact watercourse.	
If a Watercourse was Impacted, Describe Fully. Not applicable		
Describe Cause of Problem and Remedial Action Taken: At approximately 4 pm on 12/27/2015, Wastewater Operators were back flushing the south carbon canister and wastewater was released from the rupture disk located on the outlet side of the canister due to a block valve downstream. Immediate action was taken to clean up the wastewater that was release. The Maintenance Department was called out to begin vacuuming up the area. Carbon canisters are located downstream of MPPE unit. The wastewater was treated prior to the release with no environmental impact or safety concerns. A benzene water sample was collected and it was found to be less than RCRA limit of 0.5 ppm.		
Describe Area Affected and Cleanup Action Taken: The Carbon Canisters are located on the west side of waste water treatment plant. Standing water was vacuumed up by Maintenance and contract personnel.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Beck Larsen	Approved by District Supervisor:	
Title: Environmental Engineer – Gallup Refinery	Approval Date:	Expiration Date:
E-mail Address: Thurman.Larsen@wnr.com	Conditions of Approval:	Attached ☐
Date: 1/8/2016	Phone: 505-722-0258	

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 August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: WESTERN REFINING	Contact: Ed Riege	
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No. (505) 722-0217	
Facility Name: WESTERN REFINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery	
Surface Owner	Mineral Owner	API No.

LOCATION OF RELEASE

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

Latitude 35° 029' 024" Longitude 108° 024' 024"

NATURE OF RELEASE

Type of Release: treated wastewater	Volume of Release > 158.5 bbls	Volume Recovered: undetermined
Source of Release: wastewater treatment plant carbon canister	Date and Hour of Occurrence 12/27/15 @ 1600 hrs	Date and Hour of Discovery 12/27/15 @ 1600 hrs
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD (B. Powell); NMED (R Horowitz/K. VanHorn)	
By Whom? Loretta Morgan	Date and Hour: 12/27/15 2016 hrs	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

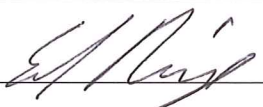
If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Wastewater operators were back flushing the south carbon canister when wastewater was released from the rupture disk. A blocked valve downstream of the canister created pressure greater than 75 psi causing the rupture disk to rupture. Actions taken included the WWTP operators changing the flow from the south carbon canister to the north carbon canister. Maintenance was called out and vacuumed up the wastewater. Before the wastewater was spilled it had been treated by the carbon and a sample collected indicated the benzene was <.5 ppm. There were no safety or environmental concerns. (For additional information see the Response Action Report dated August 2016.)

Describe Area Affected and Cleanup Action Taken.*

The carbon canisters are located on the west side of the WWTP. The wastewater filled the earthen dike containment and overflowed allowing the wastewater to travel to the west downhill toward Pond EP-1. The wastewater did not reach EP-1. The standing wastewater was vacuumed with a Vac truck. On January 11, 2016, 2 to 3 inches of soil was removed from the area north of the containment structure and the lower level. (For drawings, photos, analytical and a full report see the Response Action Report dated August 2016.)

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: Ed Riege	Approved by Environmental Specialist:		
Title: Remediation Manager	Approval Date:	Expiration Date:	
E-mail Address: ed.riege@wnr.com	Conditions of Approval:		Attached ☐
Date: 8/24/2016	Phone: (505) 722-0217		

* Attach Additional Sheets If Necessary

Appendix B-2
Form C-141 Initial and Final Reports
January 7, 2016 Release

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 August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

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

LOCATION OF RELEASE

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

Latitude 35° 029' 024" Longitude 108° 024' 024"

NATURE OF RELEASE

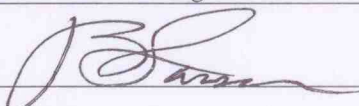
Type of Release: Untreated Wastewater	Volume of Release: 40-46 bbls (1680 - 1710 gal) (untreated wastewater)	Volume Recovered: 32-34 bbl (1342-1428 gal) (untreated wastewater)
Source of Release: Slop Oil Transfer Line from T-107/108 to API	Date and Hour of Occurrence: 1/7/2016; 2300 hrs	Date and Hour of Discovery: 1/7/2016; 2320 hrs
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD (Brandon Powell, Msg) / NMED HWB (Kristen Van Horn, Msg)	
By Whom? Cheryl Johnson	Date and Hour: 1/8/2016 (1536; 1539)	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.* At 2300 hours on January 7, 2016, the south carbon canister rupture disk at the Wastewater Treatment Plant over-pressured allowing approximately 40 to 46 bbls of untreated wastewater to be released, filling the earthen dike containment and the excess overflow ran downhill toward Pond (EP-1) but did not reach EP-1. The incident lasted for about 20 minutes. Wastewater Treatment Plant Operators immediately upon discovery changed from the south carbon canister to the north carbon canister. Since the incident occurred at night and the area was covered with snow, assessment of the extent of the contamination was not completed until the next morning.

Describe Area Affected and Cleanup Action Taken.* On January 8, a vacuum truck began to remove the untreated wastewater from the affected area at the Wastewater Treatment Plant around the carbon canister containment area and the sloping downhill area. A sample was collected of the liquid and sent to our internal onsite laboratory. The results showed that the wastewater had a benzene level that exceeded the 0.5 ppm Regulatory Limit. The vacuum truck removed about 27 bbls from the containment area and an additional 5 to 7 bbls on the downhill slope side west of the carbon canisters. Soil samples were collected and sent to outside laboratory for analysis. Analytical results are still pending. About 2 to 3 inches of soil was removed on the downhill slope west of the carbon canisters.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Beck Larsen:	Approved by Environmental Specialist:	
Title: Environmental Engineer	Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:	Attached ☐
Date: 1/22/16 Phone: (505) 722-0258		

* Attach Additional Sheets If Necessary

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 August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: WESTERN REFINING	Contact: Ed Riege	
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No. (505) 722-0217	
Facility Name: WESTERN REFINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery	
Surface Owner	Mineral Owner	API No.

LOCATION OF RELEASE

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

Latitude 35° 029' 024" Longitude 108° 024' 024"

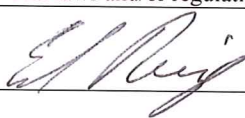
NATURE OF RELEASE

Type of Release: Partially treated wastewater	Volume of Release 46 bbls	Volume Recovered: 32-34 bbls
Source of Release: wastewater treatment plant carbon canister	Date and Hour of Occurrence 1/7/16 @ 2300 hrs	Date and Hour of Discovery 1/7/16 @ 2320 hrs
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD (B. Powell Msg.); NMED (K. VanHorn Msg.)	
By Whom? Cheryl Johnson	Date and Hour: 1/8/16 1536, 1539 hrs	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.*		

Describe Cause of Problem and Remedial Action Taken.* Wastewater operators were back flushing the south carbon canister when wastewater was released from the rupture disk. A blocked valve downstream of the canister created pressure greater than 75 psi causing the rupture disk to rupture. Actions taken included the WWTP operators changing the flow from the south carbon canister to the north carbon canister. Maintenance was called out and vacuumed up the wastewater the following morning. Before the wastewater was spilled it had been treated by the DGF unit but not by the carbon filtration. and a sample collected indicated the benzene was >.5 ppm. There were no safety concerns. (For additional information see the Response Action Report dated August 2016.)

Describe Area Affected and Cleanup Action Taken.* The carbon canisters are located on the west side of the WWTP. The wastewater filled the earthen dike containment and overflowed allowing the wastewater to travel to the west downhill toward Pond EP-1. The wastewater did not reach EP-1. The standing wastewater was vacuumed with a vac truck on January 8. The vac truck removed about 27 bbls from the containment area and an additional 5 to 7 bbls from the area downhill of the carbon canisters. On January 11, 2016, 2 to 3 inches of soil was removed from the area north of the containment structure and the lower level. (For drawings, photos, analytical and a full report see the Response Action Report dated August 2016.)

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: Ed Riege	Approved by Environmental Specialist:		
Title: Remediation Manager	Approval Date:	Expiration Date:	
E-mail Address: ed.riege@wnr.com	Conditions of Approval:		Attached ☐
Date: 8/24/2016	Phone: (505) 722-0217		

* Attach Additional Sheets If Necessary

Appendix C
Analytical Data – Released Material

Appendix C-1
Western Refining – Gallup Refinery
December 28, 2015 Internal E-Mail
Benzene Results - December 27, 2015 Release

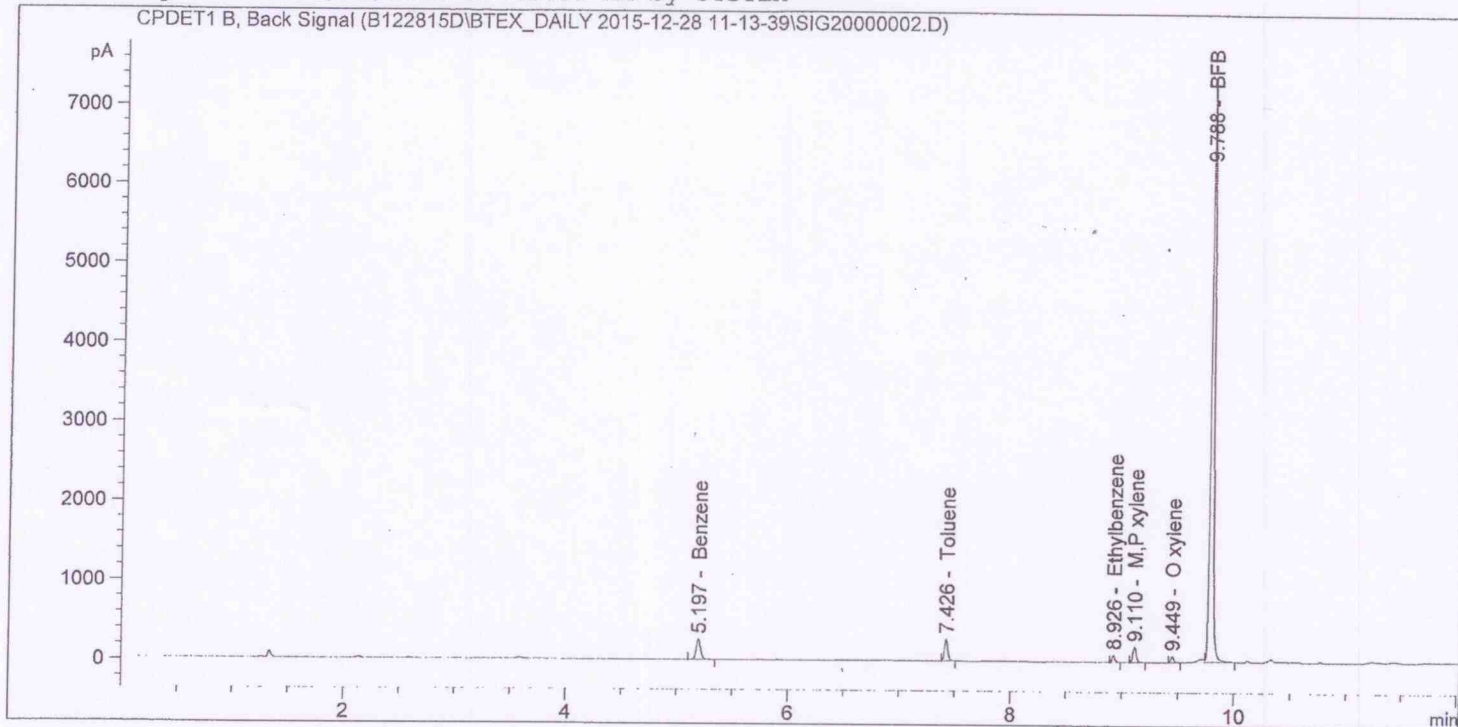
Larsen, Thurman

From: Neumann, Maribel
Sent: Monday, December 28, 2015 12:45 PM
To: Larsen, Thurman
Cc: Walters, Lucas
Subject: Canister Spill 122715
Attachments: Canister Spill 122715.pdf

Attached is the Benzene result for the Canister Spill. The result is 0.45. If you have any questions please let me know. Jesse Lawrence will be running the chloride testing.

Thanks,
Maribel Neumann
Laboratory Technician
Western Refining-Gallup

=====
Acq. Operator : SYSTEM Seq. Line : 2
Acq. Instrument : Purge and Trap Location : Vial 3
Injection Date : 12/28/2015 11:52:33 AM Inj : 1
Inj Volume : Manually
Method : C:\CHEM32\1\DATA\B122815D\BTEX_DAILY 2015-12-28 11-13-39\BTEX.M (Sequence Method)
Last changed : 12/28/2015 11:13:39 AM by SYSTEM



=====
Internal Standard Report
=====

Sorted By : Signal
Calib. Data Modified : Wednesday, November 18, 2015 11:53:12 AM
Multiplier : 50.0000
Dilution : 1.0000

Do not use Multiplier & Dilution Factor with ISTDs

Sample ISTD Information:

ISTD #	ISTD Amount [ppm]	Name
1	100.00000	BFB

Signal 1: CPDET1 B, Back Signal

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount [ppm]	Grp	Name
5.197	BB	1	713.48334	1.82544e-3	4.53296e-1		Benzene 0.45
7.426	BB	1	563.16870	0.00000	0.00000		Toluene
8.926	BB	1	164.85704	0.00000	0.00000		Ethylbenzene
9.110	BB	1	411.93872	0.00000	0.00000		M,P xylene
9.449	BB	1	147.29042	0.00000	0.00000		O xylene

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount [ppm]	Grp	Name
9.788	VB S I	1	1.43661e4	1.00000	100.00000	BFB	

Totals without ISTD(s) : 4.53296e-1

5 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Negative results set to zero (cal. curve intercept), (Toluene)
Warning : Negative results set to zero (cal. curve intercept), (Ethylbenzene)
Warning : Negative results set to zero (cal. curve intercept), (M,P xylene)
Warning : Negative results set to zero (cal. curve intercept), (O xylene)

*** End of Report ***

Appendix C-2
Western Refining – Gallup Refinery
January 8, 2016 Interoffice Memorandum
Transmittal of WWTP Analytical Results
November 12, 2015



INTEROFFICE
MEMORANDUM

Date: Friday, January 8, 2016
To: Andy Green, Process Safety Manager
From: Danyelle Montalvo, Process Engineer
Subject: **Carbon Canister Leak**

On 1/7/2016 at 11:00 PM a rupture disk on the south Carbon Canister failed causing water not filtered through the carbon canisters to spill onto the ground.

According to Pi Data, the disk ruptured around 10:37 and the total time was taken to be 19 minutes in which an average flow of 90 gpm was being pumped to the canisters. This equates to approximately 1710 gallons of water released which equals 43 barrels of water released.

At this time, I do not have compositional information about the benzene content of the water spilled but on 11/12/2015 I requested an analysis to be run on water from the waste water treatment plant before the carbon canisters. Results were as follows:

Benzene = 3.75365
Toluene = 2.40118
Ethylbenzene = 7.41332e-1
M,P xylene = 1.09132
O xylene = 1.09254

All results are in ppm.

If you have any questions please contact me at Danyelle.Montalvo@wnr.com or call me at (505) 726-9724.